SEQUENCE LISTING

<110> COGENT NEUROSCIENCE, Inc.
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<120> COMPOSITIONS AND METHODS FOR DIAGNOSING AND TREATING CONDITIONS, DISORDERS, OR DISEASES INVOLVING CELL DEATH

<130> 10001-005-999

<140> Not Assigned
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aagacgtga 309

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35 40 45
Arg Leu Arg His His Leu Leu Pro Met Tyr Ser Tyr Asp Pro Ala Glu
50 55 60
Glu Leu His Glu Ala Glu Gln Glu Leu Leu Ser Asp Met Gly Asp Pro
65 70 75 80
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atgggagacc ccaaggtggt acatggctgg cagagtggct accagcacaa gcggatgcca 240
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Arg Leu Arg His His Leu Leu Pro Met Tyr Ser Tyr Asp Pro Ala Glu
35 40 45
Glu Leu His Glu Ala Glu Gln Glu Leu Leu Ser Asp Met Gly Asp Pro
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gatgtcaaga cgtga 195

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<213> Homo sapiens

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            20                  25                  30
Gln Glu Leu Leu Ser Asp Met Gly Asp Pro Lys Val Val His Gly Trp
        35                  40                  45
Gln Ser Gly Tyr Gln His Lys Arg Met Pro Leu Leu Asp Val Lys Thr
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<400> 48

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            20                  25                  30
Ser Cys Ser Leu Thr Trp Glu Thr Pro Arg Trp Tyr Met Ala Gly Arg
        35                  40                  45
Val Ala Thr Ser Thr Ser Gly Cys His Cys Trp Met Ser Arg Arg Asp
    50                  55                  60
Leu Thr Pro Leu Pro His Pro Ser Glu Pro Gly Val Leu Asp Cys Leu
65                  70                  75                  80
Gly Pro Cys His Leu Leu Pro Leu Leu Ser Pro Gly Ser Pro Cys Trp
                85                  90                  95
Val Leu Gly Leu His Phe Ser Leu His Pro Pro Ser Ala Ala Ser Ala
            100                 105                 110
Ser His Ala Leu Thr Ile Thr Ser Leu Pro Pro Gly Leu Leu Pro Phe
        115                 120                 125
Val Gly Val Glu Leu Thr Ala His Pro Gln Ala Leu Ile Gly Arg Gly
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Phe Pro Ser Gly Met Ala Ala Ala Gly Arg His Leu Cys Phe Leu
145                 150                 155
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<211> 141
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20 25 30
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35 40 45
Pro His Pro Ser Glu Pro Gly Val Leu Asp Cys Leu Gly Pro Cys His
50 55 60
Leu Leu Pro Leu Leu Ser Pro Gly Ser Pro Cys Trp Val Leu Gly Leu
65 70 75 80
His Phe Ser Leu His Pro Pro Ser Ala Ala Ser Ala Ser His Ala Leu
85 90 95
Thr Ile Thr Ser Leu Pro Pro Gly Leu Leu Pro Phe Val Gly Val Glu

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Leu Thr Ala His Pro Gln Ala Leu Ile Gly Arg Gly Phe Pro Ser Gly
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Met Ala Ala Ala Gly Arg His Leu Cys Phe Leu
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            20                  25                  30
Met Ser Arg Arg Asp Leu Thr Pro Leu Pro His Pro Ser Glu Pro Gly
        35                  40                  45
Val Leu Asp Cys Leu Gly Pro Cys His Leu Leu Pro Leu Leu Ser Pro
    50                  55                  60
Gly Ser Pro Cys Trp Val Leu Gly Leu His Phe Ser Leu His Pro Pro
65                  70                  75                  80
Ser Ala Ala Ser Ala Ser His Ala Leu Thr Ile Thr Ser Leu Pro Pro
                85                  90                  95
Gly Leu Leu Pro Phe Val Gly Val Glu Leu Thr Ala His Pro Gln Ala
            100                 105                 110
Leu Ile Gly Arg Gly Phe Pro Ser Gly Met Ala Ala Ala Gly Arg His
        115                 120                 125
Leu Cys Phe Leu
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<212> DNA
<213> Homo sapiens

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ctgctggatg tcaagacgtg a 81

<210> 56

<211> 26
<212> PRT
<213> Homo sapiens

<400> 56
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Lys Arg Met Pro Leu Leu Asp Val Lys Thr
            20   25

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<212> DNA
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<211> 115
<212> PRT
<213> Homo sapiens

<400> 58
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Ser Arg Arg Asp Leu Thr Pro Leu Pro His Pro Ser Glu Pro Gly Val
            20   25   30
Leu Asp Cys Leu Gly Pro Cys His Leu Leu Pro Leu Leu Ser Pro Gly
        35   40   45
Ser Pro Cys Trp Val Leu Gly Leu His Phe Ser Leu His Pro Pro Ser
    50   55   60
Ala Ala Ser Ala Ser His Ala Leu Thr Ile Thr Ser Leu Pro Pro Gly
65   70   75   80
Leu Leu Pro Phe Val Gly Val Glu Leu Thr Ala His Pro Gln Ala Leu
                85   90   95
Ile Gly Arg Gly Phe Pro Ser Gly Met Ala Ala Ala Gly Arg His Leu
            100   105   110
Cys Phe Leu
        115

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<211> 27
<212> DNA
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<210> 60

<211> 8
<212> PRT
<213> Homo sapiens

<400> 60
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 1   5

<210> 61
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<212> PRT
<213> Homo sapiens

<400> 62
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            20   25   30
Gly Ser Pro Cys Trp Val Leu Gly Leu His Phe Ser Leu His Pro Pro
        35   40   45
Ser Ala Ala Ser Ala Ser His Ala Leu Thr Ile Thr Ser Leu Pro Pro
    50   55   60
Gly Leu Leu Pro Phe Val Gly Val Glu Leu Thr Ala His Pro Gln Ala
65   70   75   80
Leu Ile Gly Arg Gly Phe Pro Ser Gly Met Ala Ala Ala Gly Arg His
                85   90   95
Leu Cys Phe Leu
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<211> 84
<212> DNA
<213> Homo sapiens

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ccgcccaccc acaggcactc atag 84

<210> 64
<211> 27
<212> PRT
<213> Homo sapiens

<400> 64
Met Pro Ser Pro Ser Pro His Cys Pro Gln Ala Phe Cys Pro Leu Trp
1 5 10 15
Val Leu Ser Ser Pro Pro Thr His Arg His Ser
20 25

<210> 65
<211> 36
<212> DNA
<213> Homo sapiens

<400> 65
atggcggcgg ctggtagaca cctttgcttt ctctag 36

<210> 66
<211> 11
<212> PRT
<213> Homo sapiens

<400> 66
Met Ala Ala Ala Gly Arg His Leu Cys Phe Leu
1 5 10

<210> 67
<211> 24
<212> DNA
<213> Homo sapiens

<400> 67
atggtgatgg ggccagatgt atag 24

<210> 68
<211> 7
<212> PRT
<213> Homo sapiens

<400> 68
Met Val Met Gly Pro Asp Val
1 5

<210> 69
<211> 18
<212> DNA
<213> Homo sapiens

<400> 69
atggggccag atgtatag 18

<210> 70
<211> 5
<212> PRT
<213> Homo sapiens

<400> 70
Met Gly Pro Asp Val

1 5

<210> 71
<211> 33
<212> DNA
<213> Homo sapiens

<400> 71
atgtatagta ttcagtatat attttgtaaa taa 33

<210> 72
<211> 10
<212> PRT
<213> Homo sapiens

<400> 72
Met Tyr Ser Ile Gln Tyr Ile Phe Cys Lys
1 5 10

<210> 73
<211> 15
<212> DNA
<213> Homo sapiens

<400> 73
atgttttgtg gctaa 15

<210> 74
<211> 4
<212> PRT
<213> Homo sapiens

<400> 74
Met Phe Cys Gly
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<210> 75
<211> 1825
<212> DNA
<213> Homo sapiens

<400> 75
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agtccatgac ccacccctgc accaaccctc agccaacaag ccgaagcccc ccactatgct 180
ggacatcccc tcagagccat gtagtctcac catccatacg attcagttga ttcagcacaa 240
ccgacgtctt cgcaacctta ttgccacagc tcaggcccag aatcagcagc agacagaagg 300
tgtaaaaact gaagagagtg aacctcttcc ctcgtgccct gggtcacctc ctctccctga 360
tgacctcctg cctttagatt gtaagaatcc caatgcacca ttccagatcc ggcacagtga 420
cccagagagt gacttttatc gtgggaaagg ggaacctgtg actgaactca gctggcactc 480
ctgtcggcag ctcctctacc aggcagtggc cacaatcctg gcccacgcgg gctttgactg 540
tgctaatgag agtgtcctgg agaccctaac tgatgtggca catgagtatt gccttaagtt 600
taccaagttg ctgcgttttg ctgtggaccg ggaggcccgg ctgggacaga ctccttttcc 660
tgatgtgatg gagcaggtat tccatgaagt gggtattggc agtgtgctct ccctccagaa 720
gttctggcag caccgcatca aggactatca cagttacatg ctacagatta gtaagcaact 780

ctctgaagaa tatgaaagga ttgtcaatcc tgagaaggcc acagaggacg ctaaacctgt 840
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gcacaaaatc ctgctgatag aaataagtgt aaccggccag gcacagtggc tcatgcctgt 1500
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agcctgacca acatggaaaa aaccccatct ctactaaaaa tacaaaatta gccgggtgtg 1620
gtggcacatg cctgtaatcc cagctactca ggaaggctga ggcaggagaa ctgcttgaac 1680
ctgggaggtg gaggttgtgg tgagccgaga ctccagcctg ggcaacaaga gtgaaactcc 1740
gtctcaaaaa taaataaata aataaaagaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1800
aaaaaaaaaa aaaaaaaggg cggcc 1825

<210> 76
<211> 1239
<212> DNA
<213> Homo sapiens

<400> 76
atgttgagat actggggaga gataccaata tcatcaagcc agaccaacag aagttccttc 60
gatttgctcc cacgggagtt ccgtctggtg gaagtccatg acccacccct gcaccaaccc 120
tcagccaaca agccgaagcc ccccactatg ctggacatcc cctcagagcc atgtagtctc 180
accatccata cgattcagtt gattcagcac aaccgacgtc ttcgcaacct tattgccaca 240
gctcaggccc agaatcagca gcagacagaa ggtgtaaaaa ctgaagagag tgaacctctt 300
ccctcgtgcc ctgggtcacc tcctctccct gatgacctcc tgcctttaga ttgtaagaat 360
cccaatgcac cattccagat ccggcacagt gacccagaga gtgactttta tcgtgggaaa 420
ggggaacctg tgactgaact cagctggcac tcctgtcggc agctcctcta ccaggcagtg 480
gccacaatcc tggcccacgc gggctttgac tgtgctaatg agagtgtcct ggagacccta 540
actgatgtgg cacatgagta ttgccttaag tttaccaagt tgctgcgttt tgctgtggac 600
cgggaggccc ggctgggaca gactcctttt cctgatgtga tggagcaggt attccatgaa 660
gtgggtattg gcagtgtgct ctccctccag aagttctggc agcaccgcat caaggactat 720
cacagttaca tgctacagat tagtaagcaa ctctctgaag aatatgaaag gattgtcaat 780
cctgagaagg ccacagagga cgctaaacct gtgaagatca aggaggaacc tgtgagcgac 840
atcacttttc ctgtcagtga ggagctggag gctgaccttg cttctggaga ccagtcactg 900
cctatgggag tgcttggggc tcagagcgaa cgcttcccat ctaacctgga ggttgaagct 960
tcaccacagg cttcaagtgc agaggtaaat gcttctcctc tttggaatct ggcccatgtg 1020
aaaatggagc ctcaagaaag tgaagaaggc aatgtctctg ggcatggtgt gctgggcagt 1080
gatgtcttcg aggagcctat gtcaggcatg agtgaagctg ggattcctca gagccctgat 1140
gactcagata gcagctatgg ttcccactcc actgacagcc tcatggggtc ctcccctgtt 1200
ttcaaccagc gctgcaagaa gaggatgagg aaaatataa 1239

<210> 77
<211> 412
<212> PRT
<213> Homo sapiens

<400> 77
Met Leu Arg Tyr Trp Gly Glu Ile Pro Ile Ser Ser Ser Gln Thr Asn
1 5 10 15

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Arg Ser Ser Phe Asp Leu Leu Pro Arg Glu Phe Arg Leu Val Glu Val
            20                  25                  30
His Asp Pro Pro Leu His Gln Pro Ser Ala Asn Lys Pro Lys Pro Pro
        35                  40                  45
Thr Met Leu Asp Ile Pro Ser Glu Pro Cys Ser Leu Thr Ile His Thr
    50                  55                  60
Ile Gln Leu Ile Gln His Asn Arg Arg Leu Arg Asn Leu Ile Ala Thr
65                  70                  75                  80
Ala Gln Ala Gln Asn Gln Gln Gln Thr Glu Gly Val Lys Thr Glu Glu
                85                  90                  95
Ser Glu Pro Leu Pro Ser Cys Pro Gly Ser Pro Pro Leu Pro Asp Asp
            100                 105                 110
Leu Leu Pro Leu Asp Cys Lys Asn Pro Asn Ala Pro Phe Gln Ile Arg
        115                 120                 125
His Ser Asp Pro Glu Ser Asp Phe Tyr Arg Gly Lys Gly Glu Pro Val
    130                 135                 140
Thr Glu Leu Ser Trp His Ser Cys Arg Gln Leu Leu Tyr Gln Ala Val
145                 150                 155                 160
Ala Thr Ile Leu Ala His Ala Gly Phe Asp Cys Ala Asn Glu Ser Val
                165                 170                 175
Leu Glu Thr Leu Thr Asp Val Ala His Glu Tyr Cys Leu Lys Phe Thr
            180                 185                 190
Lys Leu Leu Arg Phe Ala Val Asp Arg Glu Ala Arg Leu Gly Gln Thr
        195                 200                 205
Pro Phe Pro Asp Val Met Glu Gln Val Phe His Glu Val Gly Ile Gly
    210                 215                 220
Ser Val Leu Ser Leu Gln Lys Phe Trp Gln His Arg Ile Lys Asp Tyr
225                 230                 235                 240
His Ser Tyr Met Leu Gln Ile Ser Lys Gln Leu Ser Glu Glu Tyr Glu
                245                 250                 255
Arg Ile Val Asn Pro Glu Lys Ala Thr Glu Asp Ala Lys Pro Val Lys
            260                 265                 270
Ile Lys Glu Glu Pro Val Ser Asp Ile Thr Phe Pro Val Ser Glu Glu
        275                 280                 285
Leu Glu Ala Asp Leu Ala Ser Gly Asp Gln Ser Leu Pro Met Gly Val
    290                 295                 300
Leu Gly Ala Gln Ser Glu Arg Phe Pro Ser Asn Leu Glu Val Glu Ala
305                 310                 315                 320
Ser Pro Gln Ala Ser Ser Ala Glu Val Asn Ala Ser Pro Leu Trp Asn
                325                 330                 335
Leu Ala His Val Lys Met Glu Pro Gln Glu Ser Glu Glu Gly Asn Val
            340                 345                 350
Ser Gly His Gly Val Leu Gly Ser Asp Val Phe Glu Glu Pro Met Ser
        355                 360                 365
Gly Met Ser Glu Ala Gly Ile Pro Gln Ser Pro Asp Asp Ser Asp Ser
    370                 375                 380
Ser Tyr Gly Ser His Ser Thr Asp Ser Leu Met Gly Ser Ser Pro Val
385                 390                 395                 400
Phe Asn Gln Arg Cys Lys Lys Arg Met Arg Lys Ile
                405                 410
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<210> 78
<211> 105
<212> DNA
<213> Homo sapiens

<400> 78
atgacccacc cctgcaccaa ccctcagcca acaagccgaa gccccccact atgctggaca 60
tcccctcaga gccatgtagt ctcaccatcc atacgattca gttga 105

<210> 79
<211> 34
<212> PRT
<213> Homo sapiens

<400> 79
Met Thr His Pro Cys Thr Asn Pro Gln Pro Thr Ser Arg Ser Pro Pro
1 5 10 15
Leu Cys Trp Thr Ser Pro Gln Ser His Val Val Ser Pro Ser Ile Arg
20 25 30
Phe Ser

<210> 80
<211> 1092
<212> DNA
<213> Homo sapiens

<400> 80
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cacaaccgac gtcttcgcaa ccttattgcc acagctcagg cccagaatca gcagcagaca 120
gaaggtgtaa aaactgaaga gagtgaacct cttccctcgt gccctgggtc acctcctctc 180
cctgatgacc tcctgccttt agattgtaag aatcccaatg caccattcca gatccggcac 240
agtgacccag agagtgactt ttatcgtggg aaaggggaac ctgtgactga actcagctgg 300
cactcctgtc ggcagctcct ctaccaggca gtggccacaa tcctggccca cgcgggcttt 360
gactgtgcta atgagagtgt cctggagacc ctaactgatg tggcacatga gtattgcctt 420
aagtttacca agttgctgcg ttttgctgtg gaccgggagg cccggctggg acagactcct 480
tttcctgatg tgatggagca ggtattccat gaagtgggta ttggcagtgt gctctccctc 540
cagaagttct ggcagcaccg catcaaggac tatcacagtt acatgctaca gattagtaag 600
caactctctg aagaatatga aaggattgtc aatcctgaga aggccacaga ggacgctaaa 660
cctgtgaaga tcaaggagga acctgtgagc gacatcactt ttcctgtcag tgaggagctg 720
gaggctgacc ttgcttctgg agaccagtca ctgcctatgg gagtgcttgg ggctcagagc 780
gaacgcttcc catctaacct ggaggttgaa gcttcaccac aggcttcaag tgcagaggta 840
aatgcttctc ctctttggaa tctggcccat gtgaaaatgg agcctcaaga aagtgaagaa 900
ggcaatgtct ctgggcatgg tgtgctgggc agtgatgtct tcgaggagcc tatgtcaggc 960
atgagtgaag ctgggattcc tcagagccct gatgactcag atagcagcta tggttcccac 1020
tccactgaca gcctcatggg gtcctccccc gttttcaacc agcgctgcaa gaagaggatg 1080
aggaaaatat aa 1092

<210> 81
<211> 363
<212> PRT
<213> Homo sapiens

<400> 81
Met Leu Asp Ile Pro Ser Glu Pro Cys Ser Leu Thr Ile His Thr Ile
1 5 10 15
Gln Leu Ile Gln His Asn Arg Arg Leu Arg Asn Leu Ile Ala Thr Ala
20 25 30
Gln Ala Gln Asn Gln Gln Gln Thr Glu Gly Val Lys Thr Glu Glu Ser
35 40 45

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Glu Pro Leu Pro Ser Cys Pro Gly Ser Pro Pro Leu Pro Asp Asp Leu
    50                  55                  60
Leu Pro Leu Asp Cys Lys Asn Pro Asn Ala Pro Phe Gln Ile Arg His
65                  70                  75                  80
Ser Asp Pro Glu Ser Asp Phe Tyr Arg Gly Lys Gly Glu Pro Val Thr
                85                  90                  95
Glu Leu Ser Trp His Ser Cys Arg Gln Leu Leu Tyr Gln Ala Val Ala
            100                 105                 110
Thr Ile Leu Ala His Ala Gly Phe Asp Cys Ala Asn Glu Ser Val Leu
        115                 120                 125
Glu Thr Leu Thr Asp Val Ala His Glu Tyr Cys Leu Lys Phe Thr Lys
    130                 135                 140
Leu Leu Arg Phe Ala Val Asp Arg Glu Ala Arg Leu Gly Gln Thr Pro
145                 150                 155                 160
Phe Pro Asp Val Met Glu Gln Val Phe His Glu Val Gly Ile Gly Ser
                165                 170                 175
Val Leu Ser Leu Gln Lys Phe Trp Gln His Arg Ile Lys Asp Tyr His
            180                 185                 190
Ser Tyr Met Leu Gln Ile Ser Lys Gln Leu Ser Glu Glu Tyr Glu Arg
        195                 200                 205
Ile Val Asn Pro Glu Lys Ala Thr Glu Asp Ala Lys Pro Val Lys Ile
    210                 215                 220
Lys Glu Glu Pro Val Ser Asp Ile Thr Phe Pro Val Ser Glu Glu Leu
225                 230                 235                 240
Glu Ala Asp Leu Ala Ser Gly Asp Gln Ser Leu Pro Met Gly Val Leu
                245                 250                 255
Gly Ala Gln Ser Glu Arg Phe Pro Ser Asn Leu Glu Val Glu Ala Ser
            260                 265                 270
Pro Gln Ala Ser Ser Ala Glu Val Asn Ala Ser Pro Leu Trp Asn Leu
        275                 280                 285
Ala His Val Lys Met Glu Pro Gln Glu Ser Glu Glu Gly Asn Val Ser
    290                 295                 300
Gly His Gly Val Leu Gly Ser Asp Val Phe Glu Glu Pro Met Ser Gly
305                 310                 315                 320
Met Ser Glu Ala Gly Ile Pro Gln Ser Pro Asp Asp Ser Asp Ser Ser
                325                 330                 335
Tyr Gly Ser His Ser Thr Asp Ser Leu Met Gly Ser Ser Pro Val Phe
            340                 345                 350
Asn Gln Arg Cys Lys Lys Arg Met Arg Lys Ile
        355                 360
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<210> 82
<211> 18
<212> DNA
<213> Homo sapiens

<400> 82
atgacctcct gcctttag 18

<210> 83
<211> 5
<212> PRT
<213> Homo sapiens

<400> 83

Met Thr Ser Cys Leu
1 5

<210> 84
<211> 69
<212> DNA
<213> Homo sapiens

<400> 84
atgcaccatt ccagatccgg cacagtgacc cagagagtga cttttatcgt gggaaagggg 60
aacctgtga 69

<210> 85
<211> 22
<212> PRT
<213> Homo sapiens

<400> 85
Met His His Ser Arg Ser Gly Thr Val Thr Gln Arg Val Thr Phe Ile
1 5 10 15
Val Gly Lys Gly Asn Leu
20

<210> 86
<211> 24
<212> DNA
<213> Homo sapiens

<400> 86
atgagagtgt cctggagacc ctaa 24

<210> 87
<211> 7
<212> PRT
<213> Homo sapiens

<400> 87
Met Arg Val Ser Trp Arg Pro
1 5

<210> 88
<211> 96
<212> DNA
<213> Homo sapiens

<400> 88
atgtggcaca tgagtattgc cttaagttta ccaagttgct gcgttttgct gtggaccggg 60
aggcccggct gggacagact ccttttcctg atgtga 96

<210> 89
<211> 31
<212> PRT
<213> Homo sapiens

<400> 89

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Met Trp His Met Ser Ile Ala Leu Ser Leu Pro Ser Cys Cys Val Leu
 1               5                  10                  15
Leu Trp Thr Gly Arg Pro Gly Trp Asp Arg Leu Leu Phe Leu Met
            20                  25                  30
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<210> 90
<211> 87
<212> DNA
<213> Homo sapiens

<400> 90
atgagtattg ccttaagttt accaagttgc tgcgttttgc tgtggaccgg gaggcccggc 60
tgggacagac tccttttcct gatgtga 87

<210> 91
<211> 28
<212> PRT
<213> Homo sapiens

<400> 91
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Met Ser Ile Ala Leu Ser Leu Pro Ser Cys Cys Val Leu Leu Trp Thr
 1               5                  10                  15
Gly Arg Pro Gly Trp Asp Arg Leu Leu Phe Leu Met
            20                  25
```

<210> 92
<211> 600
<212> DNA
<213> Homo sapiens

<400> 92
atggagcagg tattccatga agtgggtatt ggcagtgtgc tctccctcca gaagttctgg 60
cagcaccgca tcaaggacta tcacagttac atgctacaga ttagtaagca actctctgaa 120
gaatatgaaa ggattgtcaa tcctgagaag gccacagagg acgctaaacc tgtgaagatc 180
aaggaggaac ctgtgagcga catcactttt cctgtcagtg aggagctgga ggctgacctt 240
gcttctggag accagtcact gcctatggga gtgcttgggg ctcagagcga acgcttccca 300
tctaacctgg aggttgaagc ttcaccacag gcttcaagtg cagaggtaaa tgcttctcct 360
ctttggaatc tggcccatgt gaaaatggag cctcaagaaa gtgaagaagg caatgtctct 420
gggcatggtg tgctgggcag tgatgtcttc gaggagccta tgtcaggcat gagtgaagct 480
gggattcctc agagccctga tgactcagat agcagctatg gttcccactc cactgacagc 540
ctcatggggt cctcccctgt tttcaaccag cgctgcaaga agaggatgag gaaaatataa 600

<210> 93
<211> 199
<212> PRT
<213> Homo sapiens

<400> 93
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Met Glu Gln Val Phe His Glu Val Gly Ile Gly Ser Val Leu Ser Leu
 1               5                  10                  15
Gln Lys Phe Trp Gln His Arg Ile Lys Asp Tyr His Ser Tyr Met Leu
            20                  25                  30
Gln Ile Ser Lys Gln Leu Ser Glu Glu Tyr Glu Arg Ile Val Asn Pro
        35                  40                  45
Glu Lys Ala Thr Glu Asp Ala Lys Pro Val Lys Ile Lys Glu Glu Pro
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    50                  55                  60
Val Ser Asp Ile Thr Phe Pro Val Ser Glu Glu Leu Glu Ala Asp Leu
65                  70                  75                  80
Ala Ser Gly Asp Gln Ser Leu Pro Met Gly Val Leu Gly Ala Gln Ser
                85                  90                  95
Glu Arg Phe Pro Ser Asn Leu Glu Val Glu Ala Ser Pro Gln Ala Ser
            100                 105                 110
Ser Ala Glu Val Asn Ala Ser Pro Leu Trp Asn Leu Ala His Val Lys
        115                 120                 125
Met Glu Pro Gln Glu Ser Glu Glu Gly Asn Val Ser Gly His Gly Val
    130                 135                 140
Leu Gly Ser Asp Val Phe Glu Glu Pro Met Ser Gly Met Ser Glu Ala
145                 150                 155                 160
Gly Ile Pro Gln Ser Pro Asp Asp Ser Asp Ser Ser Tyr Gly Ser His
                165                 170                 175
Ser Thr Asp Ser Leu Met Gly Ser Ser Pro Val Phe Asn Gln Arg Cys
            180                 185                 190
Lys Lys Arg Met Arg Lys Ile
        195
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<210> 94
<211> 159
<212> DNA
<213> Homo sapiens

<400> 94
atgaagtggg tattggcagt gtgctctccc tccagaagtt ctggcagcac cgcatcaagg 60
actatcacag ttacatgcta cagattagta agcaactctc tgaagaatat gaaaggattg 120
tcaatcctga gaaggccaca gaggacgcta aacctgtga 159

<210> 95
<211> 52
<212> PRT
<213> Homo sapiens

<400> 95
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Met Lys Trp Val Leu Ala Val Cys Ser Pro Ser Arg Ser Ser Gly Ser
 1               5                  10                  15
Thr Ala Ser Arg Thr Ile Thr Val Thr Cys Tyr Arg Leu Val Ser Asn
            20                  25                  30
Ser Leu Lys Asn Met Lys Gly Leu Ser Ile Leu Arg Arg Pro Gln Arg
        35                  40                  45
Thr Leu Asn Leu
    50
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<210> 96
<211> 510
<212> DNA
<213> Homo sapiens

<400> 96
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gccacagagg acgctaaacc tgtgaagatc aaggaggaac ctgtgagcga catcactttt 120
cctgtcagtg aggagctgga ggctgacctt gcttctggag accagtcact gcctatggga 180
gtgcttgggg ctcagagcga acgcttccca tctaacctgg aggttgaagc ttcaccacag 240

gcttcaagtg cagaggtaaa tgcttctcct ctttggaatc tggcccatgt gaaaatggag 300
cctcaagaaa gtgaagaagg caatgtctct gggcatggtg tgctgggcag tgatgtcttc 360
gaggagccta tgtcaggcat gagtgaagct gggattcctc agagccctga tgactcagat 420
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cgctgcaaga agaggatgag gaaaatataa 510

<210> 97
<211> 169
<212> PRT
<213> Homo sapiens

<400> 97
Met Leu Gln Ile Ser Lys Gln Leu Ser Glu Glu Tyr Glu Arg Ile Val
1 5 10 15
Asn Pro Glu Lys Ala Thr Glu Asp Ala Lys Pro Val Lys Ile Lys Glu
20 25 30
Glu Pro Val Ser Asp Ile Thr Phe Pro Val Ser Glu Glu Leu Glu Ala
35 40 45
Asp Leu Ala Ser Gly Asp Gln Ser Leu Pro Met Gly Val Leu Gly Ala
50 55 60
Gln Ser Glu Arg Phe Pro Ser Asn Leu Glu Val Glu Ala Ser Pro Gln
65 70 75 80
Ala Ser Ser Ala Glu Val Asn Ala Ser Pro Leu Trp Asn Leu Ala His
85 90 95
Val Lys Met Glu Pro Gln Glu Ser Glu Glu Gly Asn Val Ser Gly His
100 105 110
Gly Val Leu Gly Ser Asp Val Phe Glu Glu Pro Met Ser Gly Met Ser
115 120 125
Glu Ala Gly Ile Pro Gln Ser Pro Asp Asp Ser Asp Ser Ser Tyr Gly
130 135 140
Ser His Ser Thr Asp Ser Leu Met Gly Ser Ser Pro Val Phe Asn Gln
145 150 155 160
Arg Cys Lys Lys Arg Met Arg Lys Ile
165

<210> 98
<211> 51
<212> DNA
<213> Homo sapiens

<400> 98
atgaaaggat tgtcaatcct gagaaggcca cagaggacgc taaacctgtg a 51

<210> 99
<211> 16
<212> PRT
<213> Homo sapiens

<400> 99
Met Lys Gly Leu Ser Ile Leu Arg Arg Pro Gln Arg Thr Leu Asn Leu
1 5 10 15

<210> 100
<211> 336
<212> DNA

<213> Homo sapiens

<400> 100
atgggagtgc ttggggctca gagcgaacgc ttcccatcta acctggaggt tgaagcttca 60
ccacaggctt caagtgcaga ggtaaatgct tctcctcttt ggaatctggc ccatgtgaaa 120
atggagcctc aagaaagtga agaaggcaat gtctctgggc atggtgtgct gggcagtgat 180
gtcttcgagg agcctatgtc aggcatgagt gaagctggga ttcctcagag ccctgatgac 240
tcagatagca gctatggttc ccactccact gacagcctca tggggtcctc ccctgttttc 300
aaccagcgct gcaagaagag gatgaggaaa atataa 336

<210> 101
<211> 111
<212> PRT
<213> Homo sapiens

<400> 101
Met Gly Val Leu Gly Ala Gln Ser Glu Arg Phe Pro Ser Asn Leu Glu
1 5 10 15
Val Glu Ala Ser Pro Gln Ala Ser Ser Ala Glu Val Asn Ala Ser Pro
20 25 30
Leu Trp Asn Leu Ala His Val Lys Met Glu Pro Gln Glu Ser Glu Glu
35 40 45
Gly Asn Val Ser Gly His Gly Val Leu Gly Ser Asp Val Phe Glu Glu
50 55 60
Pro Met Ser Gly Met Ser Glu Ala Gly Ile Pro Gln Ser Pro Asp Asp
65 70 75 80
Ser Asp Ser Ser Tyr Gly Ser His Ser Thr Asp Ser Leu Met Gly Ser
85 90 95
Ser Pro Val Phe Asn Gln Arg Cys Lys Lys Arg Met Arg Lys Ile
100 105 110

<210> 102
<211> 33
<212> DNA
<213> Homo sapiens

<400> 102
atgcttctcc tctttggaat ctggcccatg tga 33

<210> 103
<211> 10
<212> PRT
<213> Homo sapiens

<400> 103
Met Leu Leu Leu Phe Gly Ile Trp Pro Met
1 5 10

<210> 104
<211> 216
<212> DNA
<213> Homo sapiens

<400> 104
atggagcctc aagaaagtga agaaggcaat gtctctgggc atggtgtgct gggcagtgat 60

gtcttcgagg agcctatgtc aggcatgagt gaagctggga ttcctcagag ccctgatgac 120
tcagatagca gctatggttc ccactccact gacagcctca tggggtcctc ccctgttttc 180
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<210> 105
<211> 71
<212> PRT
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<400> 105
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1 5 10 15
Leu Gly Ser Asp Val Phe Glu Glu Pro Met Ser Gly Met Ser Glu Ala
20 25 30
Gly Ile Pro Gln Ser Pro Asp Asp Ser Asp Ser Ser Tyr Gly Ser His
35 40 45
Ser Thr Asp Ser Leu Met Gly Ser Ser Pro Val Phe Asn Gln Arg Cys
50 55 60
Lys Lys Arg Met Arg Lys Ile
65 70

<210> 106
<211> 60
<212> DNA
<213> Homo sapiens

<400> 106
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<210> 107
<211> 19
<212> PRT
<213> Homo sapiens

<400> 107
Met Ser Leu Gly Met Val Cys Trp Ala Val Met Ser Ser Arg Ser Leu
1 5 10 15
Cys Gln Ala

<210> 108
<211> 48
<212> DNA
<213> Homo sapiens

<400> 108
atggtgtgct gggcagtgat gtcttcgagg agcctatgtc aggcatga 48

<210> 109
<211> 15
<212> PRT
<213> Homo sapiens

<400> 109
Met Val Cys Trp Ala Val Met Ser Ser Arg Ser Leu Cys Gln Ala

1 5 10 15

<210> 110
<211> 30
<212> DNA
<213> Homo sapiens

<400> 110
atgtcttcga ggagcctatg tcaggcatga 30

<210> 111
<211> 9
<212> PRT
<213> Homo sapiens

<400> 111
Met Ser Ser Arg Ser Leu Cys Gln Ala
1 5

<210> 112
<211> 141
<212> DNA
<213> Homo sapiens

<400> 112
atgtcaggca tgagtgaagc tgggattcct cagagccctg atgactcaga tagcagctat 60
ggttcccact ccactgacag cctcatgggg tcctcccctg ttttcaacca gcgctgcaag 120
aagaggatga ggaaaatata a 141

<210> 113
<211> 46
<212> PRT
<213> Homo sapiens

<400> 113
Met Ser Gly Met Ser Glu Ala Gly Ile Pro Gln Ser Pro Asp Asp Ser
1 5 10 15
Asp Ser Ser Tyr Gly Ser His Ser Thr Asp Ser Leu Met Gly Ser Ser
20 25 30
Pro Val Phe Asn Gln Arg Cys Lys Lys Arg Met Arg Lys Ile
35 40 45

<210> 114
<211> 132
<212> DNA
<213> Homo sapiens

<400> 114
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tccactgaca gcctcatggg gtcctcccct gttttcaacc agcgctgcaa gaagaggatg 120
aggaaaatat aa 132

<210> 115
<211> 43
<212> PRT

<213> Homo sapiens

<400> 115
Met Ser Glu Ala Gly Ile Pro Gln Ser Pro Asp Asp Ser Asp Ser Ser
 1   5   10   15
Tyr Gly Ser His Ser Thr Asp Ser Leu Met Gly Ser Ser Pro Val Phe
            20   25   30
Asn Gln Arg Cys Lys Lys Arg Met Arg Lys Ile
        35   40

<210> 116
<211> 90
<212> DNA
<213> Homo sapiens

<400> 116
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ttttcaacca gcgctgcaag aagaggatga 90

<210> 117
<211> 29
<212> PRT
<213> Homo sapiens

<400> 117
Met Thr Gln Ile Ala Ala Met Val Pro Thr Pro Leu Thr Ala Ser Trp
 1   5   10   15
Gly Pro Pro Leu Phe Ser Thr Ser Ala Ala Arg Arg Gly
            20   25

<210> 118
<211> 72
<212> DNA
<213> Homo sapiens

<400> 118
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agaagaggat ga 72

<210> 119
<211> 23
<212> PRT
<213> Homo sapiens

<400> 119
Met Val Pro Thr Pro Leu Thr Ala Ser Trp Gly Pro Pro Leu Phe Ser
 1   5   10   15
Thr Ser Ala Ala Arg Arg Gly
            20

<210> 120
<211> 57
<212> DNA
<213> Homo sapiens

<400> 120
atggggtcct cccctgtttt caaccagcgc tgcaagaaga ggatgaggaa aatataa 57

<210> 121
<211> 18
<212> PRT
<213> Homo sapiens

<400> 121
Met Gly Ser Ser Pro Val Phe Asn Gln Arg Cys Lys Lys Arg Met Arg
1 5 10 15
Lys Ile

<210> 122
<211> 15
<212> DNA
<213> Homo sapiens

<400> 122
atgaggaaaa tataa 15

<210> 123
<211> 4
<212> PRT
<213> Homo sapiens

<400> 123
Met Arg Lys Ile
1

<210> 124
<211> 45
<212> DNA
<213> Homo sapiens

<400> 124
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<210> 125
<211> 14
<212> PRT
<213> Homo sapiens

<400> 125
Met Phe Cys Pro Asp Leu Leu Asp Pro Thr Glu Lys Val Ser
1 5 10

<210> 126
<211> 132
<212> DNA
<213> Homo sapiens

<400> 126
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aaccggccag gcacagtggc tcatgcctgt aatcccagca ttttgggagg cccaggtggg 120
tggatcatct ga 132

<210> 127
<211> 43
<212> PRT
<213> Homo sapiens

<400> 127
Met Tyr Phe Ala Glu Leu Tyr Asn Arg Met Ala Gln Asn Pro Ala Asp
1 5 10 15
Arg Asn Lys Cys Asn Arg Pro Gly Thr Val Ala His Ala Cys Asn Pro
20 25 30
Ser Ile Leu Gly Gly Pro Gly Gly Trp Ile Ile
35 40

<210> 128
<211> 105
<212> DNA
<213> Homo sapiens

<400> 128
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tgtaatccca gcattttggg aggcccaggt gggtggatca tctga 105

<210> 129
<211> 34
<212> PRT
<213> Homo sapiens

<400> 129
Met Ala Gln Asn Pro Ala Asp Arg Asn Lys Cys Asn Arg Pro Gly Thr
1 5 10 15
Val Ala His Ala Cys Asn Pro Ser Ile Leu Gly Gly Pro Gly Gly Trp
20 25 30
Ile Ile

<210> 130
<211> 75
<212> DNA
<213> Homo sapiens

<400> 130
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tcgagaccag cctga 75

<210> 131
<211> 24
<212> PRT
<213> Homo sapiens

<400> 131
Met Pro Val Ile Pro Ala Phe Trp Glu Ala Gln Val Gly Gly Ser Ser
1 5 10 15

Glu Val Arg Ser Ser Arg Pro Ala
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<210> 132
<211> 39
<212> DNA
<213> Homo sapiens

<400> 132
atggaaaaaa ccccatctct actaaaaata caaaattag 39

<210> 133
<211> 12
<212> PRT
<213> Homo sapiens

<400> 133
Met Glu Lys Thr Pro Ser Leu Leu Lys Ile Gln Asn
1 5 10

<210> 134
<211> 33
<212> DNA
<213> Homo sapiens

<400> 134
atgcctgtaa tcccagctac tcaggaaggc tga 33

<210> 135
<211> 10
<212> PRT
<213> Homo sapiens

<400> 135
Met Pro Val Ile Pro Ala Thr Gln Glu Gly
1 5 10

<210> 136
<211> 542
<212> DNA
<213> Homo sapiens

<400> 136
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aataacgagt aaataatctt acttgggtag agatggcctt tgccaacaaa gtgaactgtt 120
ttggttgttt taaactcatg aagtatgggt tcagtggaaa tgtttggaac tctgaaggat 180
ttagacaagg ttttgaaaag gataatcatg ggttagaagg aagtgtttga aagtcacttt 240
gaaagttagt tttgggccag cacggtagct cacccttgta atcccagcac tttgggaggc 300
tgaggtgggt agattacttg agcccaggaa ttcaagacca gcctgggcaa catggtgaaa 360
ccctgtttct ataaaaaata atctgggctt tgtagcatat gcctgtggtc ccagctactg 420
aggaggctga ggtgggagga ttgcttgagc ccaggaggca gaggttgcag tgagccaagg 480
tcacgtcact gcactctagc ctgggcaaca gagtaagaca aaaaaaaaaa aaaagggcgg 540
cc 542

<210> 137

<211> 39
<212> DNA
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<400> 137
atggatggag gtgtcggtac taaattgaat aacgagtaa 39

<210> 138
<211> 12
<212> PRT
<213> Homo sapiens

<400> 138
Met Asp Gly Gly Val Gly Thr Lys Leu Asn Asn Glu
1 5 10

<210> 139
<211> 24
<212> DNA
<213> Homo sapiens

<400> 139
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<210> 140
<211> 7
<212> PRT
<213> Homo sapiens

<400> 140
Met Glu Val Ser Val Leu Asn
1 5

<210> 141
<211> 138
<212> DNA
<213> Homo sapiens

<400> 141
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agtggaaatg tttggaactc tgaaggattt agacaaggtt ttgaaaagga taatcatggg 120
ttagaaggaa gtgtttga 138

<210> 142
<211> 45
<212> PRT
<213> Homo sapiens

<400> 142
Met Ala Phe Ala Asn Lys Val Asn Cys Phe Gly Cys Phe Lys Leu Met
1 5 10 15
Lys Tyr Gly Phe Ser Gly Asn Val Trp Asn Ser Glu Gly Phe Arg Gln
20 25 30
Gly Phe Glu Lys Asp Asn His Gly Leu Glu Gly Ser Val
35 40 45

<210> 143
<211> 93
<212> DNA
<213> Homo sapiens

<400> 143
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aaggataatc atgggttaga aggaagtgtt tga 93

<210> 144
<211> 30
<212> PRT
<213> Homo sapiens

<400> 144
Met Lys Tyr Gly Phe Ser Gly Asn Val Trp Asn Ser Glu Gly Phe Arg
1 5 10 15
Gln Gly Phe Glu Lys Asp Asn His Gly Leu Glu Gly Ser Val
20 25 30

<210> 145
<211> 72
<212> DNA
<213> Homo sapiens

<400> 145
atgggttcag tggaaatgtt tggaactctg aaggatttag acaaggtttt gaaaaggata 60
atcatgggtt ag 72

<210> 146
<211> 23
<212> PRT
<213> Homo sapiens

<400> 146
Met Gly Ser Val Glu Met Phe Gly Thr Leu Lys Asp Leu Asp Lys Val
1 5 10 15
Leu Lys Arg Ile Ile Met Gly
20

<210> 147
<211> 57
<212> DNA
<213> Homo sapiens

<400> 147
atgtttggaa ctctgaagga tttagacaag gttttgaaaa ggataatcat gggttag 57

<210> 148
<211> 18
<212> PRT
<213> Homo sapiens

<400> 148
Met Phe Gly Thr Leu Lys Asp Leu Asp Lys Val Leu Lys Arg Ile Ile

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 1               5                  10                  15
Met Gly


<210> 149
<211> 30
<212> DNA
<213> Homo sapiens

<400> 149
atggtgaaac cctgtttcta taaaaaataa                                    30

<210> 150
<211> 9
<212> PRT
<213> Homo sapiens

<400> 150
Met Val Lys Pro Cys Phe Tyr Lys Lys
 1               5

<210> 151
<211> 75
<212> DNA
<213> Homo sapiens

<400> 151
atgcctgtgg tcccagctac tgaggaggct gaggtgggag gattgcttga gcccaggagg    60
cagaggttgc agtga                                                    75

<210> 152
<211> 24
<212> PRT
<213> Homo sapiens

<400> 152
Met Pro Val Val Pro Ala Thr Glu Glu Ala Glu Val Gly Gly Leu Leu
 1               5                  10                  15
Glu Pro Arg Arg Gln Arg Leu Gln
            20

<210> 153
<211> 771
<212> DNA
<213> Homo sapiens

<400> 153
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catgtgggtt gtgccaggta gagaaacagg aagtcaatca tctgtgacag tctctattct   120
gtcgttttgc tccttggtat ttgatttgca ctatatttag ttgaagcctg ttcactgttt   180
aaaaccggag gtatcttcaa aggcatggag acctggttcc agtaaatgtc ccaccagtgg   240
ggtatagaaa gcatgctcat gaccctgccg tgtcgtctga ggtacccgtt cttatcctag   300
tggttcagga agagaaaacg cagtttgcac tttcaagaca gcttctctaa ggctggcatg   360
ttatctcctt gctttgcttt ttgccgtttt aaaatgtgta attgttccag cattccaatg   420
gtcttgtgca tagcagggga ctgtaaccaa aaataaacat gtatttgtgt aattggtttg   480
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aagaagtctt gaatagctct ttactgtctt acttggggtt gataagattt gagtgtttgc 540
aatttttac taaatgtagc tccaaagtct taaatggctt gtttgttctt aaactgttaa 600
ttgatgaaac tgtgcataag tttacaatgt actaacttat tttgcttatt atatatagtg 660
ttttattgga aattgtaacc acacacttca gcatgatgaa aataaagatt agtgtttcca 720
tttaaataaa tgttttatcc tcccataaaa aaaaaaaaaa aaagggcggc c 771

<210> 154
<211> 108
<212> DNA
<213> Homo sapiens

<400> 154
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tctattctgt cgttttgctc cttggtattt gatttgcact atatttag 108

<210> 155
<211> 35
<212> PRT
<213> Homo sapiens

<400> 155
Met Cys Pro Met Trp Val Val Pro Gly Arg Glu Thr Gly Ser Gln Ser
1 5 10 15
Ser Val Thr Val Ser Ile Leu Ser Phe Cys Ser Leu Val Phe Asp Leu
20 25 30
His Tyr Ile
35

<210> 156
<211> 99
<212> DNA
<213> Homo sapiens

<400> 156
atgtgggttg tgccaggtag agaaacagga agtcaatcat ctgtgacagt ctctattctg 60
tcgttttgct ccttggtatt tgatttgcac tatatttag 99

<210> 157
<211> 32
<212> PRT
<213> Homo sapiens

<400> 157
Met Trp Val Val Pro Gly Arg Glu Thr Gly Ser Gln Ser Ser Val Thr
1 5 10 15
Val Ser Ile Leu Ser Phe Cys Ser Leu Val Phe Asp Leu His Tyr Ile
20 25 30

<210> 158
<211> 21
<212> DNA
<213> Homo sapiens

<400> 158
atggagacct ggttccagta a 21

<210> 159
<211> 6
<212> PRT
<213> Homo sapiens

<400> 159
Met Glu Thr Trp Phe Gln
1 5

<210> 160
<211> 75
<212> DNA
<213> Homo sapiens

<400> 160
atgtcccacc agtggggtat agaaagcatg ctcatgaccc tgccgtgtcg tctgaggtac 60
ccgttcttat cctag 75

<210> 161
<211> 24
<212> PRT
<213> Homo sapiens

<400> 161
Met Ser His Gln Trp Gly Ile Glu Ser Met Leu Met Thr Leu Pro Cys
1 5 10 15
Arg Leu Arg Tyr Pro Phe Leu Ser
20

<210> 162
<211> 48
<212> DNA
<213> Homo sapiens

<400> 162
atgctcatga ccctgccgtg tcgtctgagg tacccgttct tatcctag 48

<210> 163
<211> 15
<212> PRT
<213> Homo sapiens

<400> 163
Met Leu Met Thr Leu Pro Cys Arg Leu Arg Tyr Pro Phe Leu Ser
1 5 10 15

<210> 164
<211> 42
<212> DNA
<213> Homo sapiens

<400> 164
atgaccctgc cgtgtcgtct gaggtacccg ttcttatcct ag 42

<210> 165

<211> 13
<212> PRT
<213> Homo sapiens

<400> 165
Met Thr Leu Pro Cys Arg Leu Arg Tyr Pro Phe Leu Ser
 1   5   10

<210> 166
<211> 99
<212> DNA
<213> Homo sapiens

<400> 166
atgttatctc cttgctttgc tttttgccgt tttaaaatgt gtaattgttc cagcattcca 60
atggtcttgt gcatagcagg ggactgtaac caaaaataa 99

<210> 167
<211> 32
<212> PRT
<213> Homo sapiens

<400> 167
Met Leu Ser Pro Cys Phe Ala Phe Cys Arg Phe Lys Met Cys Asn Cys
 1   5   10   15
Ser Ser Ile Pro Met Val Leu Cys Ile Ala Gly Asp Cys Asn Gln Lys
            20   25   30

<210> 168
<211> 63
<212> DNA
<213> Homo sapiens

<400> 168
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taa 63

<210> 169
<211> 20
<212> PRT
<213> Homo sapiens

<400> 169
Met Cys Asn Cys Ser Ser Ile Pro Met Val Leu Cys Ile Ala Gly Asp
 1   5   10   15
Cys Asn Gln Lys
            20

<210> 170
<211> 39
<212> DNA
<213> Homo sapiens

<400> 170
atggtcttgt gcatagcagg ggactgtaac caaaaataa 39

<210> 171
<211> 12
<212> PRT
<213> Homo sapiens

<400> 171
Met Val Leu Cys Ile Ala Gly Asp Cys Asn Gln Lys
 1   5   10

<210> 172
<211> 177
<212> DNA
<213> Homo sapiens

<400> 172
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ttgataagat ttgagtgttt gcaatttttt actaaatgta gctccaaagt cttaaatggc 120
ttgtttgttc ttaaactgtt aattgatgaa actgtgcata agtttacaat gtactaa 177

<210> 173
<211> 58
<212> PRT
<213> Homo sapiens

<400> 173
Met Tyr Leu Cys Asn Trp Phe Glu Glu Val Leu Asn Ser Ser Leu Leu
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Ser Tyr Leu Gly Leu Ile Arg Phe Glu Cys Leu Gln Phe Phe Thr Lys
            20   25   30
Cys Ser Ser Lys Val Leu Asn Gly Leu Phe Val Leu Lys Leu Leu Ile
        35   40   45
Asp Glu Thr Val His Lys Phe Thr Met Tyr
    50   55

<210> 174
<211> 27
<212> DNA
<213> Homo sapiens

<400> 174
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<210> 175
<211> 8
<212> PRT
<213> Homo sapiens

<400> 175
Met Ala Cys Leu Phe Leu Asn Cys
 1   5

<210> 176
<211> 75
<212> DNA
<213> Homo sapiens

<400> 176
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tattggaaat tgtaa 75

<210> 177
<211> 24
<212> PRT
<213> Homo sapiens

<400> 177
Met Lys Leu Cys Ile Ser Leu Gln Cys Thr Asn Leu Phe Cys Leu Leu
1 5 10 15
Tyr Ile Val Phe Tyr Trp Lys Leu
20

<210> 178
<211> 33
<212> DNA
<213> Homo sapiens

<400> 178
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<210> 179
<211> 10
<212> PRT
<213> Homo sapiens

<400> 179
Met Met Lys Ile Lys Ile Ser Val Ser Ile
1 5 10

<210> 180
<211> 30
<212> DNA
<213> Homo sapiens

<400> 180
atgaaaataa agattagtgt ttccatttaa 30

<210> 181
<211> 9
<212> PRT
<213> Homo sapiens

<400> 181
Met Lys Ile Lys Ile Ser Val Ser Ile
1 5

<210> 182
<211> 42
<212> DNA
<213> Homo sapiens

<400> 182

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<210> 183
<211> 14
<212> PRT
<213> Homo sapiens

<400> 183
Met Phe Tyr Pro Pro Ile Lys Lys Lys Lys Lys Arg Ala Ala
1 5 10

<210> 184
<211> 1669
<212> DNA
<213> Homo sapiens

<400> 184
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cctatagaga gctacaacaa tgcccaaaag aaagccaaag agaagatctg ccaggttgtc 120
tgctatgctt gtgccagtta caccagaggt gaagcctaaa agaacatcaa gttcaaggaa 180
aatgaagaca aaaagtgata tgatggaaga aaacatagat acaagtgccc aagcagttgc 240
tgaaaccaag caagaagcag ttgttgaaga agactacaat gaaaatgcta aaaatggaga 300
agccaaaatt acagaggcac cagcttctga aaaagaaatt gtggaagtaa aagaagaaaa 360
tattgaagat gccacagaaa agggaggaga aaagaaagaa gcagtggcag cagaagtaaa 420
aaatgaagaa gaagatcaga aagaagatga agaagatcaa aacgaagaga aaggggaagc 480
tggaaaagaa gacaaagatg aaaaagggga agaagatgga aaagaggata aaaatggaaa 540
tgagaaagga gaagatgcaa aagagaaaga agatggaaaa aaaggtgaag acggaaaagg 600
aaatggagaa gatggaaaag agaaaggaga agatgaaaaa gaggaagaag acagaaaaga 660
aacaggagtt ggaaaagaga atgaagatgg aaaagagaag ggagataaaa aagaggggaa 720
agatgtaaaa gtcaaagaag atgaaaaaga gagagaagat ggaaaagaag atgaaggtgg 780
aaatgaggaa gaagctggaa aagagaaaga agatttaaaa gaagaggaag aaggaaaaga 840
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ttaaaataaa tacaaatgtt tatttcagaa gggcagtttt gattatatgt gaatacacaa 1440
attttactgg atttatctta ataaaaagac tctgacgatg attgtgtttt gttatatctt 1500
caaaaatata gctagtgaaa tattgtgctt aatttttttc tattgtgtta ttcatgaaaa 1560
tatttaatat tcactgacat aaaattaata taaagtaaaa ttcaccattt taattataat 1620
aaaaataaag tatataattc aaaaaaaaaa aaaaaaaaaa agggcggcc 1669

<210> 185
<211> 819
<212> DNA
<213> Homo sapiens

<400> 185
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atgatggaag aaaacataga tacaagtgcc caagcagttg ctgaaaccaa gcaagaagca 180

gttgttgaag aagactacaa tgaaaatgct aaaaatggag aagccaaaat tacagaggca 240
ccagcttctg aaaaagaaat tgtggaagta aaagaagaaa atattgaaga tgccacagaa 300
aagggaggag aaaagaaaga agcagtggca gcagaagtaa aaaatgaaga agaagatcag 360
aaagaagatg aagaagatca aaacgaagag aaaggggaag ctggaaaaga agacaaagat 420
gaaaaagggg aagaagatgg aaaagaggat aaaaatggaa atgagaaagg agaagatgca 480
aaagagaaag aagatggaaa aaaaggtgaa gacggaaaag gaaatggaga agatggaaaa 540
gagaaaggag aagatgaaaa agaggaagaa gacagaaaag aaacaggagt tggaaaagag 600
aatgaagatg gaaaagagaa gggagataaa aaagagggga aagatgtaaa agtcaaagaa 660
gatgaaaaag agagagaaga tggaaaagaa gatgaaggtg gaaatgagga agaagctgga 720
aaagagaaag aagatttaaa agaagaggaa gaaggaaaag aggaagatga gatcaaagaa 780
gatgatggaa aaaaagagga gccacagagt attgtttaa 819

<210> 186
<211> 272
<212> PRT
<213> Homo sapiens

<400> 186
Met Pro Lys Arg Lys Pro Lys Arg Arg Ser Ala Arg Leu Ser Ala Met
 1   5   10   15
Leu Val Pro Val Thr Pro Glu Val Lys Pro Lys Arg Thr Ser Ser Ser
            20   25   30
Arg Lys Met Lys Thr Lys Ser Asp Met Met Glu Glu Asn Ile Asp Thr
        35   40   45
Ser Ala Gln Ala Val Ala Glu Thr Lys Gln Glu Ala Val Val Glu Glu
    50   55   60
Asp Tyr Asn Glu Asn Ala Lys Asn Gly Glu Ala Lys Ile Thr Glu Ala
65   70   75   80
Pro Ala Ser Glu Lys Glu Ile Val Glu Val Lys Glu Glu Asn Ile Glu
                85   90   95
Asp Ala Thr Glu Lys Gly Gly Glu Lys Lys Glu Ala Val Ala Ala Glu
            100   105   110
Val Lys Asn Glu Glu Glu Asp Gln Lys Glu Asp Glu Glu Asp Gln Asn
        115   120   125
Glu Glu Lys Gly Glu Ala Gly Lys Glu Asp Lys Asp Glu Lys Gly Glu
    130   135   140
Glu Asp Gly Lys Glu Asp Lys Asn Gly Asn Glu Lys Gly Glu Asp Ala
145   150   155   160
Lys Glu Lys Glu Asp Gly Lys Lys Gly Glu Asp Gly Lys Gly Asn Gly
                165   170   175
Glu Asp Gly Lys Glu Lys Gly Glu Asp Glu Lys Glu Glu Glu Asp Arg
            180   185   190
Lys Glu Thr Gly Val Gly Lys Glu Asn Glu Asp Gly Lys Glu Lys Gly
        195   200   205
Asp Lys Lys Glu Gly Lys Asp Val Lys Val Lys Glu Asp Glu Lys Glu
    210   215   220
Arg Glu Asp Gly Lys Glu Asp Glu Gly Gly Asn Glu Glu Glu Ala Gly
225   230   235   240
Lys Glu Lys Glu Asp Leu Lys Glu Glu Glu Glu Gly Lys Glu Glu Asp
                245   250   255
Glu Ile Lys Glu Asp Asp Gly Lys Lys Glu Glu Pro Gln Ser Ile Val
            260   265   270

<210> 187
<211> 774

<212> DNA
<213> Homo sapiens

<400> 187
atgcttgtgc cagttacacc agaggtgaag cctaaaagaa catcaagttc aaggaaaatg 60
aagacaaaaa gtgatatgat ggaagaaaac atagatacaa gtgcccaagc agttgctgaa 120
accaagcaag aagcagttgt tgaagaagac tacaatgaaa atgctaaaaa tggagaagcc 180
aaaattacag aggcaccagc ttctgaaaaa gaaattgtgg aagtaaaaga agaaaatatt 240
gaagatgcca cagaaaaggg aggagaaaag aaagaagcag tggcagcaga agtaaaaaat 300
gaagaagaag atcagaaaga agatgaagaa gatcaaaacg aagagaaagg ggaagctgga 360
aaagaagaca aagatgaaaa aggggaagaa gatggaaaag aggataaaaa tggaaatgag 420
aaaggagaag atgcaaaaga gaaagaagat ggaaaaaaag gtgaagacgg aaaaggaaat 480
ggagaagatg gaaaagagaa aggagaagat gaaaaagagg aagaagacag aaaagaaaca 540
ggagttggaa aagagaatga agatggaaaa gagaagggag ataaaaaaga ggggaaagat 600
gtaaaagtca aagaagatga aaaagagaga gaagatggaa aagaagatga aggtggaaat 660
gaggaagaag ctggaaaaga gaaagaagat ttaaaagaag aggaagaagg aaaagaggaa 720
gatgagatca aagaagatga tggaaaaaaa gaggagccac agagtattgt ttaa 774

<210> 188
<211> 257
<212> PRT
<213> Homo sapiens

<400> 188
Met Leu Val Pro Val Thr Pro Glu Val Lys Pro Lys Arg Thr Ser Ser
1 5 10 15
Ser Arg Lys Met Lys Thr Lys Ser Asp Met Met Glu Glu Asn Ile Asp
20 25 30
Thr Ser Ala Gln Ala Val Ala Glu Thr Lys Gln Glu Ala Val Val Glu
35 40 45
Glu Asp Tyr Asn Glu Asn Ala Lys Asn Gly Glu Ala Lys Ile Thr Glu
50 55 60
Ala Pro Ala Ser Glu Lys Glu Ile Val Glu Val Lys Glu Glu Asn Ile
65 70 75 80
Glu Asp Ala Thr Glu Lys Gly Gly Glu Lys Lys Glu Ala Val Ala Ala
85 90 95
Glu Val Lys Asn Glu Glu Glu Asp Gln Lys Glu Asp Glu Glu Asp Gln
100 105 110
Asn Glu Glu Lys Gly Glu Ala Gly Lys Glu Asp Lys Asp Glu Lys Gly
115 120 125
Glu Glu Asp Gly Lys Glu Asp Lys Asn Gly Asn Glu Lys Gly Glu Asp
130 135 140
Ala Lys Glu Lys Glu Asp Gly Lys Lys Gly Glu Asp Gly Lys Gly Asn
145 150 155 160
Gly Glu Asp Gly Lys Glu Lys Gly Glu Asp Glu Lys Glu Glu Glu Asp
165 170 175
Arg Lys Glu Thr Gly Val Gly Lys Glu Asn Glu Asp Gly Lys Glu Lys
180 185 190
Gly Asp Lys Lys Glu Gly Lys Asp Val Lys Val Lys Glu Asp Glu Lys
195 200 205
Glu Arg Glu Asp Gly Lys Glu Asp Glu Gly Gly Asn Glu Glu Glu Ala
210 215 220
Gly Lys Glu Lys Glu Asp Leu Lys Glu Glu Glu Glu Gly Lys Glu Glu
225 230 235 240
Asp Glu Ile Lys Glu Asp Asp Gly Lys Lys Glu Glu Pro Gln Ser Ile

245 250 255

Val

<210> 189
<211> 717
<212> DNA
<213> Homo sapiens

<400> 189
atgaagacaa aaagtgatat gatggaagaa aacatagata caagtgccca agcagttgct 60
gaaaccaagc aagaagcagt tgttgaagaa gactacaatg aaaatgctaa aaatggagaa 120
gccaaaatta cagaggcacc agcttctgaa aaagaaattg tggaagtaaa agaagaaaat 180
attgaagatg ccacagaaaa gggaggagaa aagaaagaag cagtggcagc agaagtaaaa 240
aatgaagaag aagatcagaa agaagatgaa gaagatcaaa acgaagagaa aggggaagct 300
ggaaaagaag acaaagatga aaaaggggaa gaagatggaa aagaggataa aaatggaaat 360
gagaaaggag aagatgcaaa agagaaagaa gatggaaaaa aaggtgaaga cggaaaagga 420
aatggagaag atggaaaaga gaaaggagaa gatgaaaaag aggaagaaga cagaaaagaa 480
acaggagttg gaaaagagaa tgaagatgga aaagagaagg gagataaaaa agaggggaaa 540
gatgtaaaag tcaaagaaga tgaaaaagag agagaagatg gaaaagaaga tgaaggtgga 600
aatgaggaag aagctggaaa agagaaagaa gatttaaaag aagaggaaga aggaaaagag 660
gaagatgaga tcaaagaaga tgatggaaaa aaagaggagc cacagagtat tgtttaa 717

<210> 190
<211> 238
<212> PRT
<213> Homo sapiens

<400> 190
Met Lys Thr Lys Ser Asp Met Met Glu Glu Asn Ile Asp Thr Ser Ala
1 5 10 15
Gln Ala Val Ala Glu Thr Lys Gln Glu Ala Val Val Glu Glu Asp Tyr
20 25 30
Asn Glu Asn Ala Lys Asn Gly Glu Ala Lys Ile Thr Glu Ala Pro Ala
35 40 45
Ser Glu Lys Glu Ile Val Glu Val Lys Glu Glu Asn Ile Glu Asp Ala
50 55 60
Thr Glu Lys Gly Gly Glu Lys Lys Glu Ala Val Ala Ala Glu Val Lys
65 70 75 80
Asn Glu Glu Glu Asp Gln Lys Glu Asp Glu Glu Asp Gln Asn Glu Glu
85 90 95
Lys Gly Glu Ala Gly Lys Glu Asp Lys Asp Glu Lys Gly Glu Glu Asp
100 105 110
Gly Lys Glu Asp Lys Asn Gly Asn Glu Lys Gly Glu Asp Ala Lys Glu
115 120 125
Lys Glu Asp Gly Lys Lys Gly Glu Asp Gly Lys Gly Asn Gly Glu Asp
130 135 140
Gly Lys Glu Lys Gly Glu Asp Glu Lys Glu Glu Glu Asp Arg Lys Glu
145 150 155 160
Thr Gly Val Gly Lys Glu Asn Glu Asp Gly Lys Glu Lys Gly Asp Lys
165 170 175
Lys Glu Gly Lys Asp Val Lys Val Lys Glu Asp Glu Lys Glu Arg Glu
180 185 190
Asp Gly Lys Glu Asp Glu Gly Gly Asn Glu Glu Glu Ala Gly Lys Glu
195 200 205

```
Lys Glu Asp Leu Lys Glu Glu Glu Glu Gly Lys Glu Glu Asp Glu Ile
    210                 215                 220
Lys Glu Asp Asp Gly Lys Lys Glu Glu Pro Gln Ser Ile Val
225                 230                 235
```

<210> 191
<211> 699
<212> DNA
<213> Homo sapiens

<400> 191

```
atgatggaag aaaacataga tacaagtgcc caagcagttg ctgaaaccaa gcaagaagca      60
gttgttgaag aagactacaa tgaaaatgct aaaaatggag aagccaaaat tacagaggca     120
ccagcttctg aaaaagaaat tgtggaagta aaagaagaaa atattgaaga tgccacagaa     180
aagggaggag aaaagaaaga agcagtggca gcagaagtaa aaaatgaaga agaagatcag     240
aaagaagatg aagaagatca aaacgaagag aaaggggaag ctggaaaaga agacaaagat     300
gaaaaagggg aagaagatgg aaaagaggat aaaaatggaa atgagaaagg agaagatgca     360
aaagagaaag aagatggaaa aaaaggtgaa gacggaaaag gaaatggaga agatggaaaa     420
gagaaaggag aagatgaaaa agaggaagaa gacagaaaag aaacaggagt tggaaaagag     480
aatgaagatg gaaaagagaa gggagataaa aaagagggga aagatgtaaa agtcaaagaa     540
gatgaaaaag agagagaaga tggaaaagaa gatgaaggtg gaaatgagga agaagctgga     600
aaagagaaag aagatttaaa agaagaggaa gaaggaaaag aggaagatga gatcaaagaa     660
gatgatggaa aaaaagagga gccacagagt attgtttaa                            699
```

<210> 192
<211> 232
<212> PRT
<213> Homo sapiens

<400> 192

```
Met Met Glu Glu Asn Ile Asp Thr Ser Ala Gln Ala Val Ala Glu Thr
 1               5                  10                  15
Lys Gln Glu Ala Val Val Glu Glu Asp Tyr Asn Glu Asn Ala Lys Asn
            20                  25                  30
Gly Glu Ala Lys Ile Thr Glu Ala Pro Ala Ser Glu Lys Glu Ile Val
        35                  40                  45
Glu Val Lys Glu Glu Asn Ile Glu Asp Ala Thr Glu Lys Gly Gly Glu
    50                  55                  60
Lys Lys Glu Ala Val Ala Ala Glu Val Lys Asn Glu Glu Glu Asp Gln
65                  70                  75                  80
Lys Glu Asp Glu Glu Asp Gln Asn Glu Glu Lys Gly Glu Ala Gly Lys
                85                  90                  95
Glu Asp Lys Asp Glu Lys Gly Glu Glu Asp Gly Lys Glu Asp Lys Asn
            100                 105                 110
Gly Asn Glu Lys Gly Glu Asp Ala Lys Glu Lys Glu Asp Gly Lys Lys
        115                 120                 125
Gly Glu Asp Gly Lys Gly Asn Gly Glu Asp Gly Lys Glu Lys Gly Glu
    130                 135                 140
Asp Glu Lys Glu Glu Glu Asp Arg Lys Glu Thr Gly Val Gly Lys Glu
145                 150                 155                 160
Asn Glu Asp Gly Lys Glu Lys Gly Asp Lys Lys Glu Gly Lys Asp Val
                165                 170                 175
Lys Val Lys Glu Asp Glu Lys Glu Arg Glu Asp Gly Lys Glu Asp Glu
            180                 185                 190
Gly Gly Asn Glu Glu Glu Ala Gly Lys Glu Lys Glu Asp Leu Lys Glu
```

```
        195                 200                 205
Glu Glu Glu Gly Lys Glu Glu Asp Glu Ile Lys Glu Asp Asp Gly Lys
    210                 215                 220
Lys Glu Glu Pro Gln Ser Ile Val
225                 230
```

<210> 193
<211> 696
<212> DNA
<213> Homo sapiens

<400> 193

```
atggaagaaa acatagatac aagtgcccaa gcagttgctg aaaccaagca agaagcagtt      60
gttgaagaag actacaatga aaatgctaaa aatggagaag ccaaaattac agaggcacca     120
gcttctgaaa aagaaattgt ggaagtaaaa gaagaaaata ttgaagatgc cacagaaaag     180
ggaggagaaa agaaagaagc agtggcagca gaagtaaaaa atgaagaaga agatcagaaa     240
gaagatgaag aagatcaaaa cgaagagaaa ggggaagctg gaaaagaaga caaagatgaa     300
aaaggggaag aagatggaaa agaggataaa aatggaaatg agaaaggaga agatgcaaaa     360
gagaaagaag atggaaaaaa aggtgaagac ggaaaaggaa atggagaaga tggaaaagag     420
aaaggagaag atgaaaaaga ggaagaagac agaaaagaaa caggagttgg aaaagagaat     480
gaagatggaa aagagaaggg agataaaaaa gaggggaaag atgtaaaagt caaagaagat     540
gaaaaagaga gagaagatgg aaaagaagat gaaggtggaa atgaggaaga agctggaaaa     600
gagaaagaag atttaaaaga agaggaagaa ggaaaagagg aagatgagat caaagaagat     660
gatggaaaaa aagaggagcc acagagtatt gtttaa                               696
```

<210> 194
<211> 231
<212> PRT
<213> Homo sapiens

<400> 194

```
Met Glu Glu Asn Ile Asp Thr Ser Ala Gln Ala Val Ala Glu Thr Lys
 1               5                  10                  15
Gln Glu Ala Val Val Glu Glu Asp Tyr Asn Glu Asn Ala Lys Asn Gly
            20                  25                  30
Glu Ala Lys Ile Thr Glu Ala Pro Ala Ser Glu Lys Glu Ile Val Glu
        35                  40                  45
Val Lys Glu Glu Asn Ile Glu Asp Ala Thr Glu Lys Gly Gly Glu Lys
    50                  55                  60
Lys Glu Ala Val Ala Ala Glu Val Lys Asn Glu Glu Glu Asp Gln Lys
65                  70                  75                  80
Glu Asp Glu Glu Asp Gln Asn Glu Glu Lys Gly Glu Ala Gly Lys Glu
                85                  90                  95
Asp Lys Asp Glu Lys Gly Glu Glu Asp Gly Lys Glu Asp Lys Asn Gly
            100                 105                 110
Asn Glu Lys Gly Glu Asp Ala Lys Glu Lys Glu Asp Gly Lys Lys Gly
        115                 120                 125
Glu Asp Gly Lys Gly Asn Gly Glu Asp Gly Lys Glu Lys Gly Glu Asp
    130                 135                 140
Glu Lys Glu Glu Glu Asp Arg Lys Glu Thr Gly Val Gly Lys Glu Asn
145                 150                 155                 160
Glu Asp Gly Lys Glu Lys Gly Asp Lys Lys Glu Gly Lys Asp Val Lys
                165                 170                 175
Val Lys Glu Asp Glu Lys Glu Arg Glu Asp Gly Lys Glu Asp Glu Gly
            180                 185                 190
```

Gly Asn Glu Glu Glu Ala Gly Lys Glu Lys Glu Asp Leu Lys Glu Glu
195 200 205
Glu Glu Gly Lys Glu Glu Asp Glu Ile Lys Glu Asp Asp Gly Lys Lys
210 215 220
Glu Glu Pro Gln Ser Ile Val
225 230

<210> 195
<211> 72
<212> DNA
<213> Homo sapiens

<400> 195
atgaaaatgc taaaaatgga gaagccaaaa ttacagaggc accagcttct gaaaaagaaa 60
ttgtggaagt aa 72

<210> 196
<211> 23
<212> PRT
<213> Homo sapiens

<400> 196
Met Lys Met Leu Lys Met Glu Lys Pro Lys Leu Gln Arg His Gln Leu
1 5 10 15
Leu Lys Lys Lys Leu Trp Lys
20

<210> 197
<211> 66
<212> DNA
<213> Homo sapiens

<400> 197
atgctaaaaa tggagaagcc aaaattacag aggcaccagc ttctgaaaaa gaaattgtgg 60
aagtaa 66

<210> 198
<211> 21
<212> PRT
<213> Homo sapiens

<400> 198
Met Leu Lys Met Glu Lys Pro Lys Leu Gln Arg His Gln Leu Leu Lys
1 5 10 15
Lys Lys Leu Trp Lys
20

<210> 199
<211> 57
<212> DNA
<213> Homo sapiens

<400> 199
atggagaagc caaaattaca gaggcaccag cttctgaaaa agaaattgtg gaagtaa 57

<210> 200
<211> 18
<212> PRT
<213> Homo sapiens

<400> 200
Met Glu Lys Pro Lys Leu Gln Arg His Gln Leu Leu Lys Lys Lys Leu
 1   5   10   15
Trp Lys

<210> 201
<211> 51
<212> DNA
<213> Homo sapiens

<400> 201
atgccacaga aaagggagga gaaaagaaag aagcagtggc agcagaagta a   51

<210> 202
<211> 16
<212> PRT
<213> Homo sapiens

<400> 202
Met Pro Gln Lys Arg Glu Glu Lys Arg Lys Lys Gln Trp Gln Gln Lys
 1   5   10   15

<210> 203
<211> 306
<212> DNA
<213> Homo sapiens

<400> 203
atgaagaaga agatcagaaa gaagatgaag aagatcaaaa cgaagagaaa ggggaagctg   60
gaaaagaaga caaagatgaa aaaggggaag aagatggaaa agaggataaa aatggaaatg   120
agaaaggaga agatgcaaaa gagaaagaag atggaaaaaa aggtgaagac ggaaaaggaa   180
atggagaaga tggaaaagag aaaggagaag atgaaaaaga ggaagaagac agaaaagaaa   240
caggagttgg aaaagagaat gaagatggaa aagagaaggg agataaaaaa gaggggaaag   300
atgtaa   306

<210> 204
<211> 101
<212> PRT
<213> Homo sapiens

<400> 204
Met Lys Lys Lys Ile Arg Lys Lys Met Lys Lys Ile Lys Thr Lys Arg
 1   5   10   15
Lys Gly Lys Leu Glu Lys Lys Thr Lys Met Lys Lys Gly Lys Lys Met
            20   25   30
Glu Lys Arg Ile Lys Met Glu Met Arg Lys Glu Lys Met Gln Lys Arg
        35   40   45
Lys Lys Met Glu Lys Lys Val Lys Thr Glu Lys Glu Met Glu Lys Met
    50   55   60

```
Glu Lys Arg Lys Glu Lys Met Lys Lys Arg Lys Lys Thr Glu Lys Lys
65                  70                  75                  80
Gln Glu Leu Glu Lys Arg Met Lys Met Glu Lys Arg Arg Glu Ile Lys
                85                  90                  95
Lys Arg Gly Lys Met
            100
```

<210> 205
<211> 282
<212> DNA
<213> Homo sapiens

<400> 205
atgaagaaga tcaaaacgaa gagaaagggg aagctggaaa agaagacaaa gatgaaaaag 60
gggaagaaga tggaaaagag gataaaaatg gaaatgagaa aggagaagat gcaaaagaga 120
aagaagatgg aaaaaaaggt gaagacggaa aaggaaatgg agaagatgga aaagagaaag 180
gagaagatga aaaagaggaa gaagacagaa aagaaacagg agttggaaaa gagaatgaag 240
atggaaaaga gaagggagat aaaaaagagg ggaaagatgt aa 282

<210> 206
<211> 93
<212> PRT
<213> Homo sapiens

<400> 206
```
Met Lys Lys Ile Lys Thr Lys Arg Lys Gly Lys Leu Glu Lys Lys Thr
 1               5                  10                  15
Lys Met Lys Lys Gly Lys Lys Met Glu Lys Arg Ile Lys Met Glu Met
            20                  25                  30
Arg Lys Glu Lys Met Gln Lys Arg Lys Lys Met Glu Lys Lys Val Lys
        35                  40                  45
Thr Glu Lys Glu Met Glu Lys Met Glu Lys Arg Lys Glu Lys Met Lys
    50                  55                  60
Lys Arg Lys Lys Thr Glu Lys Lys Gln Glu Leu Glu Lys Arg Met Lys
65                  70                  75                  80
Met Glu Lys Arg Arg Glu Ile Lys Lys Arg Gly Lys Met
                85                  90
```

<210> 207
<211> 231
<212> DNA
<213> Homo sapiens

<400> 207
atgaaaaagg ggaagaagat ggaaaagagg ataaaaatgg aaatgagaaa ggagaagatg 60
caaaagagaa agaagatgga aaaaaaggtg aagacggaaa aggaaatgga gaagatggaa 120
aagagaaagg agaagatgaa aaagaggaag aagacagaaa agaaacagga gttggaaaag 180
agaatgaaga tggaaaagag aagggagata aaaaagaggg gaaagatgta a 231

<210> 208
<211> 76
<212> PRT
<213> Homo sapiens

<400> 208

```
Met Lys Lys Gly Lys Lys Met Glu Lys Arg Ile Lys Met Glu Met Arg
 1               5                  10                  15
Lys Glu Lys Met Gln Lys Arg Lys Lys Met Glu Lys Lys Val Lys Thr
            20                  25                  30
Glu Lys Glu Met Glu Lys Met Glu Lys Arg Lys Glu Lys Met Lys Lys
        35                  40                  45
Arg Lys Lys Thr Glu Lys Lys Gln Glu Leu Glu Lys Arg Met Lys Met
    50                  55                  60
Glu Lys Arg Arg Glu Ile Lys Lys Arg Gly Lys Met
65                  70                  75
```

<210> 209
<211> 213
<212> DNA
<213> Homo sapiens

<400> 209
atggaaaaga ggataaaaat ggaaatgaga aaggagaaga tgcaaaagag aaagaagatg 60
gaaaaaaagg tgaagacgga aaaggaaatg gagaagatgg aaaagagaaa ggagaagatg 120
aaaaagagga agaagacaga aaagaaacag gagttggaaa agagaatgaa gatggaaaag 180
agaagggaga taaaaaagag gggaaagatg taa 213

<210> 210
<211> 70
<212> PRT
<213> Homo sapiens

<400> 210
```
Met Glu Lys Arg Ile Lys Met Glu Met Arg Lys Glu Lys Met Gln Lys
 1               5                  10                  15
Arg Lys Lys Met Glu Lys Lys Val Lys Thr Glu Lys Glu Met Glu Lys
            20                  25                  30
Met Glu Lys Arg Lys Glu Lys Met Lys Lys Arg Lys Lys Thr Glu Lys
        35                  40                  45
Lys Gln Glu Leu Glu Lys Arg Met Lys Met Glu Lys Arg Arg Glu Ile
    50                  55                  60
Lys Lys Arg Gly Lys Met
65                  70
```

<210> 211
<211> 195
<212> DNA
<213> Homo sapiens

<400> 211
atggaaatga gaaaggagaa gatgcaaaag agaaagaaga tggaaaaaaa ggtgaagacg 60
gaaaaggaaa tggagaagat ggaaaagaga aaggagaaga tgaaaaagag gaagaagaca 120
gaaaagaaac aggagttgga aaagagaatg aagatggaaa agagaaggga gataaaaaag 180
aggggaaaga tgtaa 195

<210> 212
<211> 64
<212> PRT
<213> Homo sapiens

<400> 212
Met Glu Met Arg Lys Glu Lys Met Gln Lys Arg Lys Lys Met Glu Lys
 1   5   10   15
Lys Val Lys Thr Glu Lys Glu Met Glu Lys Met Glu Lys Arg Lys Glu
            20   25   30
Lys Met Lys Lys Arg Lys Lys Thr Glu Lys Lys Gln Glu Leu Glu Lys
        35   40   45
Arg Met Lys Met Glu Lys Arg Arg Glu Ile Lys Lys Arg Gly Lys Met
    50   55   60

<210> 213
<211> 189
<212> DNA
<213> Homo sapiens

<400> 213
atgagaaagg agaagatgca aaagagaaag aagatggaaa aaaaggtgaa gacggaaaag 60
gaaatggaga agatggaaaa gagaaaggag aagatgaaaa agaggaagaa gacagaaaag 120
aaacaggagt tggaaaagag aatgaagatg gaaaagagaa gggagataaa aaagagggga 180
aagatgtaa 189

<210> 214
<211> 62
<212> PRT
<213> Homo sapiens

<400> 214
Met Arg Lys Glu Lys Met Gln Lys Arg Lys Lys Met Glu Lys Lys Val
 1   5   10   15
Lys Thr Glu Lys Glu Met Glu Lys Met Glu Lys Arg Lys Glu Lys Met
            20   25   30
Lys Lys Arg Lys Lys Thr Glu Lys Lys Gln Glu Leu Glu Lys Arg Met
        35   40   45
Lys Met Glu Lys Arg Arg Glu Ile Lys Lys Arg Gly Lys Met
    50   55   60

<210> 215
<211> 174
<212> DNA
<213> Homo sapiens

<400> 215
atgcaaaaga gaaagaagat ggaaaaaaag gtgaagacgg aaaaggaaat ggagaagatg 60
gaaaagagaa aggagaagat gaaaaagagg aagaagacag aaaagaaaca ggagttggaa 120
aagagaatga agatggaaaa gagaagggag ataaaaaaga ggggaaagat gtaa 174

<210> 216
<211> 57
<212> PRT
<213> Homo sapiens

<400> 216
Met Gln Lys Arg Lys Lys Met Glu Lys Lys Val Lys Thr Glu Lys Glu
 1   5   10   15
Met Glu Lys Met Glu Lys Arg Lys Glu Lys Met Lys Lys Arg Lys Lys

```
            20                  25                  30
Thr Glu Lys Lys Gln Glu Leu Glu Lys Arg Met Lys Met Glu Lys Arg
        35                  40                  45
Arg Glu Ile Lys Lys Arg Gly Lys Met
    50                  55
```

<210> 217
<211> 156
<212> DNA
<213> Homo sapiens

<400> 217
atggaaaaaa aggtgaagac ggaaaaggaa atggagaaga tggaaaagag aaaggagaag 60
atgaaaaaga ggaagaagac agaaaagaaa caggagttgg aaaagagaat gaagatggaa 120
aagagaaggg agataaaaaa gaggggaaag atgtaa 156

<210> 218
<211> 51
<212> PRT
<213> Homo sapiens

<400> 218

```
Met Glu Lys Lys Val Lys Thr Glu Lys Glu Met Glu Lys Met Glu Lys
 1               5                  10                  15
Arg Lys Glu Lys Met Lys Lys Arg Lys Lys Thr Glu Lys Lys Gln Glu
            20                  25                  30
Leu Glu Lys Arg Met Lys Met Glu Lys Arg Arg Glu Ile Lys Lys Arg
        35                  40                  45
Gly Lys Met
    50
```

<210> 219
<211> 126
<212> DNA
<213> Homo sapiens

<400> 219
atggagaaga tggaaaagag aaaggagaag atgaaaaaga ggaagaagac agaaaagaaa 60
caggagttgg aaaagagaat gaagatggaa aagagaaggg agataaaaaa gaggggaaag 120
atgtaa 126

<210> 220
<211> 41
<212> PRT
<213> Homo sapiens

<400> 220

```
Met Glu Lys Met Glu Lys Arg Lys Glu Lys Met Lys Lys Arg Lys Lys
 1               5                  10                  15
Thr Glu Lys Lys Gln Glu Leu Glu Lys Arg Met Lys Met Glu Lys Arg
            20                  25                  30
Arg Glu Ile Lys Lys Arg Gly Lys Met
        35                  40
```

<210> 221

<211> 117
<212> DNA
<213> Homo sapiens

<400> 221
atggaaaaga gaaaggagaa gatgaaaaag aggaagaaga cagaaaagaa acaggagttg 60
gaaaagagaa tgaagatgga aaagagaagg gagataaaaa agaggggaaa gatgtaa 117

<210> 222
<211> 38
<212> PRT
<213> Homo sapiens

<400> 222
Met Glu Lys Arg Lys Glu Lys Met Lys Lys Arg Lys Lys Thr Glu Lys
1 5 10 15
Lys Gln Glu Leu Glu Lys Arg Met Lys Met Glu Lys Arg Arg Glu Ile
20 25 30
Lys Lys Arg Gly Lys Met
35

<210> 223
<211> 96
<212> DNA
<213> Homo sapiens

<400> 223
atgaaaaaga ggaagaagac agaaaagaaa caggagttgg aaaagagaat gaagatggaa 60
aagagaaggg agataaaaaa gaggggaaag atgtaa 96

<210> 224
<211> 31
<212> PRT
<213> Homo sapiens

<400> 224
Met Lys Lys Arg Lys Lys Thr Glu Lys Lys Gln Glu Leu Glu Lys Arg
1 5 10 15
Met Lys Met Glu Lys Arg Arg Glu Ile Lys Lys Arg Gly Lys Met
20 25 30

<210> 225
<211> 48
<212> DNA
<213> Homo sapiens

<400> 225
atgaagatgg aaaagagaag ggagataaaa aagaggggaa agatgtaa 48

<210> 226
<211> 15
<212> PRT
<213> Homo sapiens

<400> 226

Met Lys Met Glu Lys Arg Arg Glu Ile Lys Lys Arg Gly Lys Met
1 5 10 15

<210> 227
<211> 42
<212> DNA
<213> Homo sapiens

<400> 227
atggaaaaga gaagggagat aaaaaagagg ggaaagatgt aa 42

<210> 228
<211> 13
<212> PRT
<213> Homo sapiens

<400> 228
Met Glu Lys Arg Arg Glu Ile Lys Lys Arg Gly Lys Met
1 5 10

<210> 229
<211> 78
<212> DNA
<213> Homo sapiens

<400> 229
atgaaaaaga gagagaagat ggaaaagaag atgaaggtgg aaatgaggaa gaagctggaa 60
aagagaaaga agatttaa 78

<210> 230
<211> 25
<212> PRT
<213> Homo sapiens

<400> 230
Met Lys Lys Arg Glu Lys Met Glu Lys Lys Met Lys Val Glu Met Arg
1 5 10 15
Lys Lys Leu Glu Lys Arg Lys Lys Ile
20 25

<210> 231
<211> 60
<212> DNA
<213> Homo sapiens

<400> 231
atggaaaaga agatgaaggt ggaaatgagg aagaagctgg aaaagagaaa gaagatttaa 60

<210> 232
<211> 19
<212> PRT
<213> Homo sapiens

<400> 232
Met Glu Lys Lys Met Lys Val Glu Met Arg Lys Lys Leu Glu Lys Arg

1 5 10 15
Lys Lys Ile

<210> 233
<211> 48
<212> DNA
<213> Homo sapiens

<400> 233
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<210> 234
<211> 15
<212> PRT
<213> Homo sapiens

<400> 234
Met Lys Val Glu Met Arg Lys Lys Leu Glu Lys Arg Lys Lys Ile
1 5 10 15

<210> 235
<211> 36
<212> DNA
<213> Homo sapiens

<400> 235
atgaggaaga agctggaaaa gagaaagaag atttaa 36

<210> 236
<211> 11
<212> PRT
<213> Homo sapiens

<400> 236
Met Arg Lys Lys Leu Glu Lys Arg Lys Lys Ile
1 5 10

<210> 237
<211> 84
<212> DNA
<213> Homo sapiens

<400> 237
atgagatcaa agaagatgat ggaaaaaaag aggagccaca gagtattgtt taaaactgcc 60
ctatgtagtt tcataatttg gtaa 84

<210> 238
<211> 27
<212> PRT
<213> Homo sapiens

<400> 238
Met Arg Ser Lys Lys Met Met Glu Lys Lys Arg Ser His Arg Val Leu
1 5 10 15

Phe Lys Thr Ala Leu Cys Ser Phe Ile Ile Trp
20 25

<210> 239
<211> 69
<212> DNA
<213> Homo sapiens

<400> 239
atgatggaaa aaaagaggag ccacagagta ttgtttaaaa ctgccctatg tagtttcata 60
atttggtaa 69

<210> 240
<211> 22
<212> PRT
<213> Homo sapiens

<400> 240
Met Met Glu Lys Lys Arg Ser His Arg Val Leu Phe Lys Thr Ala Leu
1 5 10 15
Cys Ser Phe Ile Ile Trp
20

<210> 241
<211> 66
<212> DNA
<213> Homo sapiens

<400> 241
atggaaaaaa agaggagcca cagagtattg tttaaaactg ccctatgtag tttcataatt 60
tggtaa 66

<210> 242
<211> 21
<212> PRT
<213> Homo sapiens

<400> 242
Met Glu Lys Lys Arg Ser His Arg Val Leu Phe Lys Thr Ala Leu Cys
1 5 10 15
Ser Phe Ile Ile Trp
20

<210> 243
<211> 75
<212> DNA
<213> Homo sapiens

<400> 243
atgtaccttc atgttgtaaa gttaatagag ataaatattt ttatcaaaaa ttttataaac 60
acagcctttc tttag 75

<210> 244
<211> 24
<212> PRT

<213> Homo sapiens

<400> 244
Met Tyr Leu His Val Val Lys Leu Ile Glu Ile Asn Ile Phe Ile Lys
 1   5   10   15
Asn Phe Ile Asn Thr Ala Phe Leu
            20

<210> 245
<211> 75
<212> DNA
<213> Homo sapiens

<400> 245
atgaaacatt tatctataaa ttttgtgatt atagtagtgg aatacataga aaaaaatatg   60
ctttcaactt tgtga   75

<210> 246
<211> 24
<212> PRT
<213> Homo sapiens

<400> 246
Met Lys His Leu Ser Ile Asn Phe Val Ile Ile Val Val Glu Tyr Ile
 1   5   10   15
Glu Lys Asn Met Leu Ser Thr Leu
            20

<210> 247
<211> 18
<212> DNA
<213> Homo sapiens

<400> 247
atgctttcaa ctttgtga   18

<210> 248
<211> 5
<212> PRT
<213> Homo sapiens

<400> 248
Met Leu Ser Thr Leu
 1   5

<210> 249
<211> 15
<212> DNA
<213> Homo sapiens

<400> 249
atgtcaaatc tttga   15

<210> 250
<211> 4

<212> PRT
<213> Homo sapiens

<400> 250
Met Ser Asn Leu
1

<210> 251
<211> 81
<212> DNA
<213> Homo sapiens

<400> 251
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aaattgtatt cccattttta a 81

<210> 252
<211> 26
<212> PRT
<213> Homo sapiens

<400> 252
Met Leu Arg Val Lys Leu Ile Phe Pro Lys Tyr Asn Phe Ile Ile Ser
1 5 10 15
Leu Gly Lys Met Lys Leu Tyr Ser His Phe
20 25

<210> 253
<211> 24
<212> DNA
<213> Homo sapiens

<400> 253
atgaaattgt attcccattt ttaa 24

<210> 254
<211> 7
<212> PRT
<213> Homo sapiens

<400> 254
Met Lys Leu Tyr Ser His Phe
1 5

<210> 255
<211> 27
<212> DNA
<213> Homo sapiens

<400> 255
atgtttattt cagaagggca gttttga 27

<210> 256
<211> 8
<212> PRT

<213> Homo sapiens

<400> 256
Met Phe Ile Ser Glu Gly Gln Phe
 1   5

<210> 257
<211> 90
<212> DNA
<213> Homo sapiens

<400> 257
atgattgtgt tttgttatat cttcaaaaat atagctagtg aaatattgtg cttaattttt 60
ttctattgtg ttattcatga aaatatttaa 90

<210> 258
<211> 29
<212> PRT
<213> Homo sapiens

<400> 258
Met Ile Val Phe Cys Tyr Ile Phe Lys Asn Ile Ala Ser Glu Ile Leu
 1   5   10   15
Cys Leu Ile Phe Phe Tyr Cys Val Ile His Glu Asn Ile
            20   25

<210> 259
<211> 24
<212> DNA
<213> Homo sapiens

<400> 259
atgaaaatat ttaatattca ctga 24

<210> 260
<211> 7
<212> PRT
<213> Homo sapiens

<400> 260
Met Lys Ile Phe Asn Ile His
 1   5

<210> 261
<211> 1182
<212> DNA
<213> Homo sapiens

<400> 261
tcgacccacg cgtccgtgat aaataactta taggtgatag tgataattcc tgattccaag 60
aatgccatct gataaaaaag aatagaaatg gaaagtggga ctgagaggga gtcagcaggc 120
atgctgcggt ggcggtcact ccctctgcca ctatccccag ggaaggaaag gctccgccat 180
ttgggaaagt ggtttctacg tcactggaca ccggttctga gcattagttt gagaactcgt 240
tcccgaatgt gctttcctcc ctctcccctg cccacctcaa gtttaataaa taaggttgta 300
cttttcttac tataaaataa atgtctgtaa ctgctgtgca ctgctgtaaa cttgttagag 360

aaaaaaataa cctgcatgtg ggctcctcag ttattgagtt tttgtgatcc tatctcagtc 420
tgggggggaa cattctcaag aggtgaaata caagaaagcc tttttttctt ggatcttttc 480
ccgagattca aatctccgat ttcccatttg ggggcaagtt tttttcttca ccttcaatat 540
gagaattcag cgaacttgaa agaaaaatca tctgtgagtt ccttcaggtt ctcactcata 600
gtcatgatcc ttcagaggga atatgcactg gcgagtttaa agtaagggct atgatatttg 660
atggtcccaa agtacggcag ctgcaaaaag tagtggaagg aaattgtcta cgtgtcttgg 720
aaaaattagt taggaatttg gatgggtaaa aggtaccctt gccttactcc atcttatttt 780
cttagccccc tttgagtgtt ttaactggtt tcatgtccta gtaggaagtg cattctccat 840
cctcatcctc tgccctccca ggaagtcagt gattgtcttt ttgggcttcc cctccaaagg 900
accttctgca gtggaagtgc cacatccagt tcttttcttt tgttgctgct gtgtttagat 960
aattgaagag atctttgtgc cacacaggat tttttttttt ttttaagaaa aacctataga 1020
tgaaaaatta ctaatgaaac tgtgtgtacg tgtctgtgcg tgcaacataa aaatacagta 1080
gcacctaagg agcttgaatc ttggttcctg taaaatttca aattgatgtg gtattaataa 1140
aaaaaaaaaa aacccaaaaa aaaaaaaaaa aaaagggcgg cc 1182

<210> 262
<211> 24
<212> DNA
<213> Homo sapiens

<400> 262
atgccatctg ataaaaaaga atag 24

<210> 263
<211> 7
<212> PRT
<213> Homo sapiens

<400> 263
Met Pro Ser Asp Lys Lys Glu
1 5

<210> 264
<211> 228
<212> DNA
<213> Homo sapiens

<400> 264
atggaaagtg ggactgagag ggagtcagca ggcatgctgc ggtggcggtc actccctctg 60
ccactatccc cagggaagga aaggctccgc catttgggaa agtggtttct acgtcactgg 120
acaccggttc tgagcattag tttgagaact cgttcccgaa tgtgctttcc tccctctccc 180
ctgcccacct caagtttaat aaataaggtt gtacttttct tactataa 228

<210> 265
<211> 75
<212> PRT
<213> Homo sapiens

<400> 265
Met Glu Ser Gly Thr Glu Arg Glu Ser Ala Gly Met Leu Arg Trp Arg
1 5 10 15
Ser Leu Pro Leu Pro Leu Ser Pro Gly Lys Glu Arg Leu Arg His Leu
20 25 30
Gly Lys Trp Phe Leu Arg His Trp Thr Pro Val Leu Ser Ile Ser Leu
35 40 45

Arg Thr Arg Ser Arg Met Cys Phe Pro Pro Ser Pro Leu Pro Thr Ser
50 55 60
Ser Leu Ile Asn Lys Val Val Leu Phe Leu Leu
65 70 75

<210> 266
<211> 195
<212> DNA
<213> Homo sapiens

<400> 266
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ttgggaaagt ggtttctacg tcactggaca ccggttctga gcattagttt gagaactcgt 120
tcccgaatgt gctttcctcc ctctcccctg cccacctcaa gtttaataaa taaggttgta 180
cttttcttac tataa 195

<210> 267
<211> 64
<212> PRT
<213> Homo sapiens

<400> 267
Met Leu Arg Trp Arg Ser Leu Pro Leu Pro Leu Ser Pro Gly Lys Glu
1 5 10 15
Arg Leu Arg His Leu Gly Lys Trp Phe Leu Arg His Trp Thr Pro Val
20 25 30
Leu Ser Ile Ser Leu Arg Thr Arg Ser Arg Met Cys Phe Pro Pro Ser
35 40 45
Pro Leu Pro Thr Ser Ser Leu Ile Asn Lys Val Val Leu Phe Leu Leu
50 55 60

<210> 268
<211> 69
<212> DNA
<213> Homo sapiens

<400> 268
atgtgctttc ctccctctcc cctgcccacc tcaagtttaa taaataaggt tgtacttttc 60
ttactataa 69

<210> 269
<211> 21
<212> PRT
<213> Homo sapiens

<400> 269
Met Cys Phe Pro Pro Ser Pro Leu Pro Thr Ser Ser Leu Ile Asn Lys
1 5 10 15
Val Val Leu Phe Leu
20

<210> 270
<211> 87
<212> DNA
<213> Homo sapiens

<400> 270
atgtctgtaa ctgctgtgca ctgctgtaaa cttgttagag aaaaaaataa cctgcatgtg 60
ggctcctcag ttattgagtt tttgtga 87

<210> 271
<211> 28
<212> PRT
<213> Homo sapiens

<400> 271
Met Ser Val Thr Ala Val His Cys Cys Lys Leu Val Arg Glu Lys Asn
 1   5   10   15
Asn Leu His Val Gly Ser Ser Val Ile Glu Phe Leu
            20   25

<210> 272
<211> 270
<212> DNA
<213> Homo sapiens

<400> 272
atgtgggctc ctcagttatt gagtttttgt gatcctatct cagtctgggg gggaacattc 60
tcaagaggtg aaatacaaga aagccttttt ttcttggatc ttttcccgag attcaaatct 120
ccgatttccc atttgggggc aagttttttt cttcaccttc aatatgagaa ttcagcgaac 180
ttgaaagaaa aatcatctgt gagttccttc aggttctcac tcatagtcat gatccttcag 240
agggaatatg cactggcgag tttaaagtaa 270

<210> 273
<211> 89
<212> PRT
<213> Homo sapiens

<400> 273
Met Trp Ala Pro Gln Leu Leu Ser Phe Cys Asp Pro Ile Ser Val Trp
 1   5   10   15
Gly Gly Thr Phe Ser Arg Gly Glu Ile Gln Glu Ser Leu Phe Phe Leu
            20   25   30
Asp Leu Phe Pro Arg Phe Lys Ser Pro Ile Ser His Leu Gly Ala Ser
        35   40   45
Phe Phe Leu His Leu Gln Tyr Glu Asn Ser Ala Asn Leu Lys Glu Lys
    50   55   60
Ser Ser Val Ser Ser Phe Arg Phe Ser Leu Ile Val Met Ile Leu Gln
65   70   75   80
Arg Glu Tyr Ala Leu Ala Ser Leu Lys
                85

<210> 274
<211> 21
<212> DNA
<213> Homo sapiens

<400> 274
atgagaattc agcgaacttg a 21

<210> 275

<211> 6
<212> PRT
<213> Homo sapiens

<400> 275
Met Arg Ile Gln Arg Thr
1 5

<210> 276
<211> 42
<212> DNA
<213> Homo sapiens

<400> 276
atgatccttc agagggaata tgcactggcg agtttaaagt aa 42

<210> 277
<211> 13
<212> PRT
<213> Homo sapiens

<400> 277
Met Ile Leu Gln Arg Glu Tyr Ala Leu Ala Ser Leu Lys
1 5 10

<210> 278
<211> 18
<212> DNA
<213> Homo sapiens

<400> 278
atgcactggc gagtttaa 18

<210> 279
<211> 5
<212> PRT
<213> Homo sapiens

<400> 279
Met His Trp Arg Val
1 5

<210> 280
<211> 99
<212> DNA
<213> Homo sapiens

<400> 280
atgatatttg atggtcccaa agtacggcag ctgcaaaaag tagtggaagg aaattgtcta 60
cgtgtcttgg aaaaattagt taggaatttg gatgggtaa 99

<210> 281
<211> 32
<212> PRT
<213> Homo sapiens

<400> 281
Met Ile Phe Asp Gly Pro Lys Val Arg Gln Leu Gln Lys Val Val Glu
1 5 10 15
Gly Asn Cys Leu Arg Val Leu Glu Lys Leu Val Arg Asn Leu Asp Gly
20 25 30

<210> 282
<211> 33
<212> DNA
<213> Homo sapiens

<400> 282
atggtcccaa agtacggcag ctgcaaaaag tag 33

<210> 283
<211> 10
<212> PRT
<213> Homo sapiens

<400> 283
Met Val Pro Lys Tyr Gly Ser Cys Lys Lys
1 5 10

<210> 284
<211> 54
<212> DNA
<213> Homo sapiens

<400> 284
atgggtaaaa ggtacccttg ccttactcca tcttattttc ttagcccccct ttga 54

<210> 285
<211> 17
<212> PRT
<213> Homo sapiens

<400> 285
Met Gly Lys Arg Tyr Pro Cys Leu Thr Pro Ser Tyr Phe Leu Ser Pro
1 5 10 15
Leu

<210> 286
<211> 15
<212> DNA
<213> Homo sapiens

<400> 286
atgaaaaatt actaa 15

<210> 287
<211> 4
<212> PRT
<213> Homo sapiens

<400> 287
Met Lys Asn Tyr
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<210> 288
<211> 48
<212> DNA
<213> Homo sapiens

<400> 288
atgaaactgt gtgtacgtgt ctgtgcgtgc aacataaaaa tacagtag 48

<210> 289
<211> 15
<212> PRT
<213> Homo sapiens

<400> 289
Met Lys Leu Cys Val Arg Val Cys Ala Cys Asn Ile Lys Ile Gln
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<210> 290
<211> 12
<212> DNA
<213> Homo sapiens

<400> 290
atgtggtatt aa 12

<210> 291
<211> 3
<212> PRT
<213> Homo sapiens

<400> 291
Met Trp Tyr
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<210> 292
<211> 1965
<212> DNA
<213> Homo sapiens

<400> 292
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tccctggact gaagagaggg agaatagaag cccaagacta agattctcaa aatggtttat 120
tacccagaac tctttgtctg ggtcagtcaa gaaccatttc caaacaagga catggaggga 180
aggcttccta agggaagact tcctgtccca aaggaagtga accgcaagaa gaacgatgag 240
acaaacgctg cctccctgac tccactgggc agcagtgaac tccgctcccc aagaatcagt 300
tacctccact ttttttaatc gtaacacctc catttgtatt acatatggtg tatgggtatt 360
gatgaggtca tggtatcata tatgggattt ttttctgtgt aaatcatcaa gtataagaag 420
aaactatggg actctgagcc ttgctttaga gaatttacag tggacaaata ggtgtcatca 480
aaccagtttt taatcattct gactcaagtg aaaacgctca gaatttcaca ctgtgaatcc 540
cgtttacaac ccttacaggt gggccttcag gcctggttcg ctacaacaat gtcttccaca 600
actcaaactc ccaccgcgct cacacaaccg gtccactcct gccttttcac tcacacagct 660

cccgactgct tcttgcagag gctgagagtc ccccccccac ctttttttc atttagatgt 720
aacaaaccta gtagtttatg ttcatcaatt gtctgtatat ctctatattt tatccatgta 780
ctcttttgat gtatagaagt agtttgaaac tcattgtttc cttgtggtaa gtgaccgaga 840
tgctgccaca ggacctgaga cactgatgaa tggtgctatt ttggactttc aacatgctcc 900
ttggcgaggt agctctgatg gagttatttt ttatttccat gttctaagaa ggtgttggta 960
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aaaagcaata attttacagg cattttgagg tgtctctttg ggttctttct gtttgaaagg 1260
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aaacactggc atactgagtg ggaatatgaa aatgacacct tttccaaata ttaaattgga 1380
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ttttgataag caaggtgtag atttacattt ttgtccttgc tcccaacgaa atggataaac 1500
aaaaataaat taccatctac tcatggaatg ttgttgtgtt agccagtctg aaagcccacc 1560
ttaattttta tataactgtc tttagctctt cttttgacag ggcaggcctt gttctgaact 1620
gtttcgcttc tgactgttaa acaccgatga cgcatgcact gcacttcttc gttttcttct 1680
tgctccccca ttggcctgag tttcttgtgc attactcctc tccctccttc gttagaatag 1740
gtgtatcagc tgtgtaaata gagcaagaaa acagtattct gcatctgtgg catttatgta 1800
gagttgcagt tgtgtactgc tgaaaatgca ggcttttgta acagtgtgat ctttactgat 1860
gcactcatga caagtaccca atgtatttta gctattttag tagtatttgt tcaataaata 1920
cgcaagctgt aaggtaaaaa aaaaaaaaaa aaaaaaaggg cggcc 1965

<210> 293
<211> 207
<212> DNA
<213> Homo sapiens

<400> 293
atggtttatt acccagaact ctttgtctgg gtcagtcaag aaccatttcc aaacaaggac 60
atggagggaa ggcttcctaa gggaagactt cctgtcccaa aggaagtgaa ccgcaagaag 120
aacgatgaga caaacgctgc ctccctgact ccactgggca gcagtgaact ccgctcccca 180
agaatcagtt acctccactt tttttaa 207

<210> 294
<211> 68
<212> PRT
<213> Homo sapiens

<400> 294
Met Val Tyr Tyr Pro Glu Leu Phe Val Trp Val Ser Gln Glu Pro Phe
1 5 10 15
Pro Asn Lys Asp Met Glu Gly Arg Leu Pro Lys Gly Arg Leu Pro Val
20 25 30
Pro Lys Glu Val Asn Arg Lys Lys Asn Asp Glu Thr Asn Ala Ala Ser
35 40 45
Leu Thr Pro Leu Gly Ser Ser Glu Leu Arg Ser Pro Arg Ile Ser Tyr
50 55 60
Leu His Phe Phe
65

<210> 295
<211> 147
<212> DNA
<213> Homo sapiens

<400> 295
atggagggaa ggcttcctaa gggaagactt cctgtcccaa aggaagtgaa ccgcaagaag 60
aacgatgaga caaacgctgc ctccctgact ccactgggca gcagtgaact ccgctcccca 120
agaatcagtt acctccactt tttttaa 147

<210> 296
<211> 48
<212> PRT
<213> Homo sapiens

<400> 296
Met Glu Gly Arg Leu Pro Lys Gly Arg Leu Pro Val Pro Lys Glu Val
1 5 10 15
Asn Arg Lys Lys Asn Asp Glu Thr Asn Ala Ala Ser Leu Thr Pro Leu
20 25 30
Gly Ser Ser Glu Leu Arg Ser Pro Arg Ile Ser Tyr Leu His Phe Phe
35 40 45

<210> 297
<211> 24
<212> DNA
<213> Homo sapiens

<400> 297
atgagacaaa cgctgcctcc ctga 24

<210> 298
<211> 7
<212> PRT
<213> Homo sapiens

<400> 298
Met Arg Gln Thr Leu Pro Pro
1 5

<210> 299
<211> 18
<212> DNA
<213> Homo sapiens

<400> 299
atggtgtatg ggtattga 18

<210> 300
<211> 5
<212> PRT
<213> Homo sapiens

<400> 300
Met Val Tyr Gly Tyr
1 5

<210> 301
<211> 51
<212> DNA

<213> Homo sapiens

<400> 301
atgggtattg atgaggtcat ggtatcatat atgggatttt tttctgtgta a 51

<210> 302
<211> 16
<212> PRT
<213> Homo sapiens

<400> 302
Met Gly Ile Asp Glu Val Met Val Ser Tyr Met Gly Phe Phe Ser Val
1 5 10 15

<210> 303
<211> 132
<212> DNA
<213> Homo sapiens

<400> 303
atgaggtcat ggtatcatat atgggatttt tttctgtgta aatcatcaag tataagaaga 60
aactatggga ctctgagcct tgctttagag aatttacagt ggacaaatag gtgtcatcaa 120
accagttttt aa 132

<210> 304
<211> 43
<212> PRT
<213> Homo sapiens

<400> 304
Met Arg Ser Trp Tyr His Ile Trp Asp Phe Phe Leu Cys Lys Ser Ser
1 5 10 15
Ser Ile Arg Arg Asn Tyr Gly Thr Leu Ser Leu Ala Leu Glu Asn Leu
20 25 30
Gln Trp Thr Asn Arg Cys His Gln Thr Ser Phe
35 40

<210> 305
<211> 33
<212> DNA
<213> Homo sapiens

<400> 305
atggtatcat atatgggatt tttttctgtg taa 33

<210> 306
<211> 10
<212> PRT
<213> Homo sapiens

<400> 306
Met Val Ser Tyr Met Gly Phe Phe Ser Val
1 5 10

<210> 307

<211> 21
<212> DNA
<213> Homo sapiens

<400> 307
atgggatttt tttctgtgta a 21

<210> 308
<211> 6
<212> PRT
<213> Homo sapiens

<400> 308
Met Gly Phe Phe Ser Val
1 5

<210> 309
<211> 12
<212> DNA
<213> Homo sapiens

<400> 309
atgggactct ga 12

<210> 310
<211> 3
<212> PRT
<213> Homo sapiens

<400> 310
Met Gly Leu
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<210> 311
<211> 201
<212> DNA
<213> Homo sapiens

<400> 311
atgtcttcca caactcaaac tcccaccgcg ctcacacaac cggtccactc ctgccttttc 60
actcacacag ctcccgactg cttcttgcag aggctgagag tccccccccc acctttttt 120
tcatttagat gtaacaaacc tagtagttta tgttcatcaa ttgtctgtat atctctatat 180
tttatccatg tactcttttg a 201

<210> 312
<211> 66
<212> PRT
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<400> 312
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20 25 30
Arg Val Pro Pro Pro Pro Phe Phe Ser Phe Arg Cys Asn Lys Pro Ser

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    50                  55                  60
Leu Phe
65

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<400> 314
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            20                  25                  30

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<400> 318
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<400> 320
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aggttgagcg aatgctacca gagtgtgaga gaccattgtc tcgttggctg gcgctcacgg 240
acatgcagtc acggtagcgg gagcaatcac aaaactgtaa tttacttacc aaatctcttc 300
ctttccgtag cctcgcctgc ctga 324

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<211> 107
<212> PRT
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<400> 322
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20 25 30
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35 40 45
Leu Cys Leu Gln Cys Gly Phe Leu Pro Gln Cys Cys Arg Leu Ser Glu
50 55 60
Cys Tyr Gln Ser Val Arg Asp His Cys Leu Val Gly Trp Arg Ser Arg
65 70 75 80
Thr Cys Ser His Gly Ser Gly Ser Asn His Lys Thr Val Ile Tyr Leu
85 90 95
Pro Asn Leu Phe Leu Ser Val Ala Ser Pro Ala
100 105

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<211> 78
<212> DNA
<213> Homo sapiens

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tttatttcca tgttctaa 78

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<211> 25
<212> PRT
<213> Homo sapiens

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1 5 10 15
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20 25

<210> 325
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<212> DNA
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<212> PRT
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<400> 326
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<210> 327
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<212> DNA
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<400> 327
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<210> 330
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<400> 330
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<210> 331
<211> 66
<212> DNA
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<211> 21
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<400> 332
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<400> 333
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<210> 343
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<400> 346
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<210> 347
<211> 111
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<400> 347
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<211> 36
<212> PRT
<213> Homo sapiens

<400> 348
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 20 25 30
Val Ser Ala Val
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<212> DNA
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actcctctcc ctccttcgtt agaatag 87

<210> 350
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<400> 350
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<212> DNA
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<210> 352
<211> 7
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<210> 353

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<400> 354
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<212> DNA
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<210> 356
<211> 16
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<400> 356
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<212> DNA
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<210> 359
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<210> 361
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<210> 362
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<400> 362
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<210> 363
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<400> 363
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1 5 10 15

<210> 364
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<212> DNA
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<210> 365
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<400> 365
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<210> 366
<211> 63
<212> DNA
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<210> 367
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<210> 369
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<210> 370
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aatatatgcc catatgttgt attagatgga ggatgtgaca tttcagataa aaagcttaca   180
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<213> Homo sapiens

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Phe Phe Glu Ser Leu Phe Ala Cys Asn Ile Cys Pro Tyr Val Val Leu
        35                  40                  45
Asp Gly Gly Cys Asp Ile Ser Asp Lys Lys Leu Thr Thr Leu Lys Asp
    50                  55                  60
Arg Ala Arg Glu Lys Ile Gln Met Ala His Ser Leu Ser Val Gly Gly
65                  70                  75                  80
Ser Gly Tyr Val Cys Pro Leu Leu Ile Arg Glu Val Phe Ile Gln Val
                85                  90                  95
Leu Ile Lys Leu Arg Val Cys Phe Val Gln Cys Phe Ser Glu Ala Asp
            100                 105                 110
Arg Asp Ile Met Thr Leu Ala Asn His Trp Asn Cys Pro Val Leu Ser
        115                 120                 125
Ser Asp Ser Asp Phe Cys Ile Phe Asp Leu Lys Thr Gly Phe Cys Pro
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Leu Asn Ser Phe Gln Trp Arg Asn Met Asn Thr Ile Lys Gly Thr Gln
145                 150                 155                 160
Asn Tyr Ile Pro Ala Lys Cys Phe Ser Leu Asp Ala Phe Cys His His
                165                 170                 175
Phe Ser Asn Met Asn Lys Ala Leu Leu Pro Leu Phe Ala Val Leu Cys
            180                 185                 190
Gly Asn Asp His Val Asn Leu Pro Ile Met Glu Thr Phe Leu Ser Lys
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Ala Arg Leu Pro Leu Gly Ala Thr Ser Ser Lys Gly Arg Arg His His
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Asn Val Lys Glu Leu Leu Cys Cys Ser Met Glu Glu Tyr Gln Gln Ser
            260                 265                 270
Gln Val Lys Leu Gln Asp Phe Phe Gln Cys Gly Thr Tyr Val Cys Pro
        275                 280                 285
Asp Ala Leu Asn Leu Gly Leu Pro Glu Trp Val Leu Val Ala Leu Ala
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Lys Gly Gln Leu Ser Pro Phe Ile Ser Asp Ala Leu Val Leu Arg Arg
305                 310                 315                 320
Thr Ile Leu Pro Thr Gln Val Glu Asn Met Gln Gln Pro Asn Ala His
                325                 330                 335
Arg Ile Ser Gln Pro Ile Arg Gln Ile Ile Tyr Gly Leu Leu Leu Asn
            340                 345                 350
Ala Ser Pro His Leu Asp Lys Thr Ser Trp Asn Ala Leu Pro Pro Gln
        355                 360                 365
Pro Leu Ala Phe Ser Glu Val Glu Arg Ile Asn Lys Asn Ile Arg Thr
    370                 375                 380
Ser Ile Ile Asp Ala Val Glu Leu Ala Lys Asp His Ser Asp Leu Ser
385                 390                 395                 400
Arg Leu Thr Glu Leu Ser Leu Arg Arg Arg Gln Met Leu Leu Leu Glu
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Thr Leu Lys Val Lys Gln Thr Ile Leu Glu Pro Ile Pro Thr Ser Leu
            420                 425                 430
Lys Leu Pro Ile Ala Val Ser Cys Tyr Trp Leu Gln His Thr Glu Thr
        435                 440                 445
Lys Ala Lys Leu His His Leu Gln Ser Leu Leu Leu Thr Met Leu Val
    450                 455                 460
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ctagataatg ttctgaaata cctcccaaaa aaggatcgag aaaatgttaa ggaacttctc     780
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tgctgttcca tggaagaata ccaacagtcc caggtgaagc tacaggactt cttccagtgt 840
ggtacttatg tctgtccaga tgccttgaat cttggtttac cagaatgggt attagtggct 900
ttagctaaag gccagctatc tcctttcatc agtgatgctt tggtcctaag acggaccatt 960
cttcccacac aggtggaaaa catgcagcaa ccaaatgccc acagaatatc tcagcccatc 1020
aggcaaatca tctatgggct tcttttaaat gcctcaccac atctggacaa gacatcctgg 1080
aatgcattgc ctcctcagcc tctagctttc agtgaagtgg aaaggattaa taaaaatatc 1140
agaacctcaa tcattgatgc agtagaactg gccaaggatc attctgactt aagcagattg 1200
actgagctct ccttgaggag gcggcagatg cttctgttag aaaccctgaa ggtgaaacag 1260
accattctgg agccaatccc tacttcactg aagttgccca ttgctgtcag ttgctactgg 1320
ttgcagcaca ccgagaccaa agcaaagcta catcatctac aatccttact gctcacaatg 1380
ctagtggggc ccttgattgc cataatcaac agccctggaa atgtggaccc tgtacccagg 1440
caggctcagt gtcttgctcc tcgctag 1467

<210> 375
<211> 488
<212> PRT
<213> Homo sapiens

<400> 375
Met Leu Phe Ser Thr Val Phe Ala Ser Val Ser Asn Leu Asp Leu Arg
1 5 10 15
Tyr Gly Gly Asp Tyr Asp Ser Phe Ala Asp Val Val Gln Lys Phe Phe
20 25 30
Glu Ser Leu Phe Ala Cys Asn Ile Cys Pro Tyr Val Val Leu Asp Gly
35 40 45
Gly Cys Asp Ile Ser Asp Lys Lys Leu Thr Thr Leu Lys Asp Arg Ala
50 55 60
Arg Glu Lys Ile Gln Met Ala His Ser Leu Ser Val Gly Gly Ser Gly
65 70 75 80
Tyr Val Cys Pro Leu Leu Ile Arg Glu Val Phe Ile Gln Val Leu Ile
85 90 95
Lys Leu Arg Val Cys Phe Val Gln Cys Phe Ser Glu Ala Asp Arg Asp
100 105 110
Ile Met Thr Leu Ala Asn His Trp Asn Cys Pro Val Leu Ser Ser Asp
115 120 125
Ser Asp Phe Cys Ile Phe Asp Leu Lys Thr Gly Phe Cys Pro Leu Asn
130 135 140
Ser Phe Gln Trp Arg Asn Met Asn Thr Ile Lys Gly Thr Gln Asn Tyr
145 150 155 160
Ile Pro Ala Lys Cys Phe Ser Leu Asp Ala Phe Cys His His Phe Ser
165 170 175
Asn Met Asn Lys Ala Leu Leu Pro Leu Phe Ala Val Leu Cys Gly Asn
180 185 190
Asp His Val Asn Leu Pro Ile Met Glu Thr Phe Leu Ser Lys Ala Arg
195 200 205
Leu Pro Leu Gly Ala Thr Ser Ser Lys Gly Arg Arg His His Arg Ile
210 215 220
Leu Gly Leu Leu Asn Trp Leu Ser His Phe Ala Asn Pro Thr Glu Ala
225 230 235 240
Leu Asp Asn Val Leu Lys Tyr Leu Pro Lys Lys Asp Arg Glu Asn Val
245 250 255
Lys Glu Leu Leu Cys Cys Ser Met Glu Glu Tyr Gln Gln Ser Gln Val
260 265 270
Lys Leu Gln Asp Phe Phe Gln Cys Gly Thr Tyr Val Cys Pro Asp Ala
275 280 285

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Leu Asn Leu Gly Leu Pro Glu Trp Val Leu Val Ala Leu Ala Lys Gly
    290                 295                 300
Gln Leu Ser Pro Phe Ile Ser Asp Ala Leu Val Leu Arg Arg Thr Ile
305                 310                 315                 320
Leu Pro Thr Gln Val Glu Asn Met Gln Gln Pro Asn Ala His Arg Ile
                325                 330                 335
Ser Gln Pro Ile Arg Gln Ile Ile Tyr Gly Leu Leu Leu Asn Ala Ser
            340                 345                 350
Pro His Leu Asp Lys Thr Ser Trp Asn Ala Leu Pro Pro Gln Pro Leu
        355                 360                 365
Ala Phe Ser Glu Val Glu Arg Ile Asn Lys Asn Ile Arg Thr Ser Ile
    370                 375                 380
Ile Asp Ala Val Glu Leu Ala Lys Asp His Ser Asp Leu Ser Arg Leu
385                 390                 395                 400
Thr Glu Leu Ser Leu Arg Arg Arg Gln Met Leu Leu Leu Glu Thr Leu
                405                 410                 415
Lys Val Lys Gln Thr Ile Leu Glu Pro Ile Pro Thr Ser Leu Lys Leu
            420                 425                 430
Pro Ile Ala Val Ser Cys Tyr Trp Leu Gln His Thr Glu Thr Lys Ala
        435                 440                 445
Lys Leu His His Leu Gln Ser Leu Leu Leu Thr Met Leu Val Gly Pro
    450                 455                 460
Leu Ile Ala Ile Ile Asn Ser Pro Gly Asn Val Asp Pro Val Pro Arg
465                 470                 475                 480
Gln Ala Gln Cys Leu Ala Pro Arg
                485
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<210> 376
<211> 90
<212> DNA
<213> Homo sapiens

<400> 376
atggagggga ctatgattct tttgcagatg ttgtacaaaa attctttgaa tcactgtttg 60
cttgtaatat atgcccatat gttgtattag 90

<210> 377
<211> 29
<212> PRT
<213> Homo sapiens

<400> 377
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Met Glu Gly Thr Met Ile Leu Leu Gln Met Leu Tyr Lys Asn Ser Leu
 1               5                  10                  15
Asn His Cys Leu Leu Val Ile Tyr Ala His Met Leu Tyr
            20                  25
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<210> 378
<211> 78
<212> DNA
<213> Homo sapiens

<400> 378
atgattcttt tgcagatgtt gtacaaaaat tctttgaatc actgtttgct tgtaatatat 60
gcccatatgt tgtattag 78

<210> 379
<211> 25
<212> PRT
<213> Homo sapiens

<400> 379
Met Ile Leu Leu Gln Met Leu Tyr Lys Asn Ser Leu Asn His Cys Leu
1 5 10 15
Leu Val Ile Tyr Ala His Met Leu Tyr
20 25

<210> 380
<211> 63
<212> DNA
<213> Homo sapiens

<400> 380
atgttgtaca aaaattcttt gaatcactgt ttgcttgtaa tatatgccca tatgttgtat 60
tag 63

<210> 381
<211> 20
<212> PRT
<213> Homo sapiens

<400> 381
Met Leu Tyr Lys Asn Ser Leu Asn His Cys Leu Leu Val Ile Tyr Ala
1 5 10 15
His Met Leu Tyr
20

<210> 382
<211> 33
<212> DNA
<213> Homo sapiens

<400> 382
atgcccatat gttgtattag atggaggatg tga 33

<210> 383
<211> 10
<212> PRT
<213> Homo sapiens

<400> 383
Met Pro Ile Cys Cys Ile Arg Trp Arg Met
1 5 10

<210> 384
<211> 12
<212> DNA
<213> Homo sapiens

<400> 384
atgttgtatt ag 12

<210> 385
<211> 3
<212> PRT
<213> Homo sapiens

<400> 385
Met Leu Tyr
 1

<210> 386
<211> 42
<212> DNA
<213> Homo sapiens

<400> 386
atggaggatg tgacatttca gataaaaagc ttacaacttt aa 42

<210> 387
<211> 13
<212> PRT
<213> Homo sapiens

<400> 387
Met Glu Asp Val Thr Phe Gln Ile Lys Ser Leu Gln Leu
 1   5   10

<210> 388
<211> 1260
<212> DNA
<213> Homo sapiens

<400> 388
atggcccatt ccctttctgt tggtgggagt gggtatgtat gtcccttact catccgggaa 60
gtattcatac aggttttgat caagctgcgg gtgtgttttg tccagtgctt ttcagaagca 120
gatcgggaca ttatgacact tgctaaccat tggaattgcc ctgtgttatc atcagatagt 180
gacttttgca tttttgacct gaaaactggg ttttgcccat tgaatagctt tcagtggaga 240
aatatgaaca ctattaaggg cacacaaaac tatatccctg ccaaatgctt ttcccttgat 300
gcattctgcc atcacttcag caatatgaat aaagctctac tacctctctt tgcggtgcta 360
tgtggaaatg accatgttaa tctacccatc atggagacat tcttaagtaa agcgcgtctt 420
cctcttggag ctaccagttc taaagggagg agacaccacc gaatcctggg acttctgaat 480
tggttgtctc attttgccaa ccctaccgaa gcactagata atgttctgaa atacctccca 540
aaaaaggatc gagaaaatgt taaggaactt ctctgctgtt ccatggaaga ataccaacag 600
tcccaggtga agctacagga cttcttccag tgtggtactt atgtctgtcc agatgccttg 660
aatcttggtt taccagaatg ggtattagtg gctttagcta aaggccagct atctcctttc 720
atcagtgatg ctttggtcct aagacggacc attcttccca cacaggtgga aaacatgcag 780
caaccaaatg cccacagaat atctcagccc atcaggcaaa tcatctatgg gcttctttta 840
aatgcctcac cacatctgga caagacatcc tggaatgcat tgcctcctca gcctctagct 900
ttcagtgaag tggaaaggat taataaaaat atcagaacct caatcattga tgcagtagaa 960
ctggccaagg atcattctga cttaagcaga ttgactgagc tctccttgag gaggcggcag 1020
atgcttctgt tagaaaccct gaaggtgaaa cagaccattc tggagccaat ccctacttca 1080
ctgaagttgc ccattgctgt cagttgctac tggttgcagc acaccgagac caaagcaaag 1140
ctacatcatc tacaatcctt actgctcaca atgctagtgg ggcccttgat tgccataatc 1200
aacagccctg gaaatgtgga ccctgtaccc aggcaggctc agtgtcttgc tcctcgctag 1260

<210> 389

<211> 419
<212> PRT
<213> Homo sapiens

<400> 389

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Met Ala His Ser Leu Ser Val Gly Gly Ser Gly Tyr Val Cys Pro Leu
 1               5                  10                  15
Leu Ile Arg Glu Val Phe Ile Gln Val Leu Ile Lys Leu Arg Val Cys
            20                  25                  30
Phe Val Gln Cys Phe Ser Glu Ala Asp Arg Asp Ile Met Thr Leu Ala
        35                  40                  45
Asn His Trp Asn Cys Pro Val Leu Ser Ser Asp Ser Asp Phe Cys Ile
    50                  55                  60
Phe Asp Leu Lys Thr Gly Phe Cys Pro Leu Asn Ser Phe Gln Trp Arg
65                  70                  75                  80
Asn Met Asn Thr Ile Lys Gly Thr Gln Asn Tyr Ile Pro Ala Lys Cys
                85                  90                  95
Phe Ser Leu Asp Ala Phe Cys His His Phe Ser Asn Met Asn Lys Ala
            100                 105                 110
Leu Leu Pro Leu Phe Ala Val Leu Cys Gly Asn Asp His Val Asn Leu
        115                 120                 125
Pro Ile Met Glu Thr Phe Leu Ser Lys Ala Arg Leu Pro Leu Gly Ala
    130                 135                 140
Thr Ser Ser Lys Gly Arg Arg His His Arg Ile Leu Gly Leu Leu Asn
145                 150                 155                 160
Trp Leu Ser His Phe Ala Asn Pro Thr Glu Ala Leu Asp Asn Val Leu
                165                 170                 175
Lys Tyr Leu Pro Lys Lys Asp Arg Glu Asn Val Lys Glu Leu Leu Cys
            180                 185                 190
Cys Ser Met Glu Glu Tyr Gln Gln Ser Gln Val Lys Leu Gln Asp Phe
        195                 200                 205
Phe Gln Cys Gly Thr Tyr Val Cys Pro Asp Ala Leu Asn Leu Gly Leu
    210                 215                 220
Pro Glu Trp Val Leu Val Ala Leu Ala Lys Gly Gln Leu Ser Pro Phe
225                 230                 235                 240
Ile Ser Asp Ala Leu Val Leu Arg Arg Thr Ile Leu Pro Thr Gln Val
                245                 250                 255
Glu Asn Met Gln Gln Pro Asn Ala His Arg Ile Ser Gln Pro Ile Arg
            260                 265                 270
Gln Ile Ile Tyr Gly Leu Leu Leu Asn Ala Ser Pro His Leu Asp Lys
        275                 280                 285
Thr Ser Trp Asn Ala Leu Pro Pro Gln Pro Leu Ala Phe Ser Glu Val
    290                 295                 300
Glu Arg Ile Asn Lys Asn Ile Arg Thr Ser Ile Ile Asp Ala Val Glu
305                 310                 315                 320
Leu Ala Lys Asp His Ser Asp Leu Ser Arg Leu Thr Glu Leu Ser Leu
                325                 330                 335
Arg Arg Arg Gln Met Leu Leu Leu Glu Thr Leu Lys Val Lys Gln Thr
            340                 345                 350
Ile Leu Glu Pro Ile Pro Thr Ser Leu Lys Leu Pro Ile Ala Val Ser
        355                 360                 365
Cys Tyr Trp Leu Gln His Thr Glu Thr Lys Ala Lys Leu His His Leu
    370                 375                 380
Gln Ser Leu Leu Leu Thr Met Leu Val Gly Pro Leu Ile Ala Ile Ile
385                 390                 395                 400
```

Asn Ser Pro Gly Asn Val Asp Pro Val Pro Arg Gln Ala Gln Cys Leu
405 410 415
Ala Pro Arg

<210> 390
<211> 45
<212> DNA
<213> Homo sapiens

<400> 390
atgtatgtcc cttactcatc cgggaagtat tcatacaggt tttga 45

<210> 391
<211> 14
<212> PRT
<213> Homo sapiens

<400> 391
Met Tyr Val Pro Tyr Ser Ser Gly Lys Tyr Ser Tyr Arg Phe
1 5 10

<210> 392
<211> 108
<212> DNA
<213> Homo sapiens

<400> 392
atgtccctta ctcatccggg aagtattcat acaggttttg atcaagctgc gggtgtgttt 60
tgtccagtgc ttttcagaag cagatcggga cattatgaca cttgctaa 108

<210> 393
<211> 35
<212> PRT
<213> Homo sapiens

<400> 393
Met Ser Leu Thr His Pro Gly Ser Ile His Thr Gly Phe Asp Gln Ala
1 5 10 15
Ala Gly Val Phe Cys Pro Val Leu Phe Arg Ser Arg Ser Gly His Tyr
20 25 30
Asp Thr Cys
35

<210> 394
<211> 1128
<212> DNA
<213> Homo sapiens

<400> 394
atgacacttg ctaaccattg gaattgccct gtgttatcat cagatagtga cttttgcatt 60
tttgacctga aaactgggtt ttgcccattg aatagctttc agtggagaaa tatgaacact 120
attaagggca cacaaaacta tatccctgcc aaatgctttt cccttgatgc attctgccat 180
cacttcagca atatgaataa agctctacta cctctctttg cggtgctatg tggaaatgac 240
catgttaatc tacccatcat ggagacattc ttaagtaaag cgcgtcttcc tcttggagct 300

accagttcta aagggaggag acaccaccga atcctgggac ttctgaattg gttgtctcat 360
tttgccaacc ctaccgaagc actagataat gttctgaaat acctcccaaa aaaggatcga 420
gaaaatgtta aggaacttct ctgctgttcc atggaagaat accaacagtc ccaggtgaag 480
ctacaggact tcttccagtg tggtacttat gtctgtccag atgccttgaa tcttggttta 540
ccagaatggg tattagtggc tttagctaaa ggccagctat ctcctttcat cagtgatgct 600
ttggtcctaa gacggaccat tcttcccaca caggtggaaa acatgcagca accaaatgcc 660
cacagaatat ctcagcccat caggcaaatc atctatgggc ttcttttaaa tgcctcacca 720
catctggaca agacatcctg gaatgcattg cctcctcagc ctctagcttt cagtgaagtg 780
gaaaggatta ataaaaatat cagaacctca atcattgatg cagtagaact ggccaaggat 840
cattctgact taagcagatt gactgagctc tccttgagga ggcggcagat gcttctgtta 900
gaaaccctga aggtgaaaca gaccattctg gagccaatcc ctacttcact gaagttgccc 960
attgctgtca gttgctactg gttgcagcac accgagacca aagcaaagct acatcatcta 1020
caatccttac tgctcacaat gctagtgggg cccttgattg ccataatcaa cagccctgga 1080
aatgtggacc ctgtacccag gcaggctcag tgtcttgctc ctcgctag 1128

<210> 395
<211> 375
<212> PRT
<213> Homo sapiens

<400> 395
Met Thr Leu Ala Asn His Trp Asn Cys Pro Val Leu Ser Ser Asp Ser
1 5 10 15
Asp Phe Cys Ile Phe Asp Leu Lys Thr Gly Phe Cys Pro Leu Asn Ser
20 25 30
Phe Gln Trp Arg Asn Met Asn Thr Ile Lys Gly Thr Gln Asn Tyr Ile
35 40 45
Pro Ala Lys Cys Phe Ser Leu Asp Ala Phe Cys His His Phe Ser Asn
50 55 60
Met Asn Lys Ala Leu Leu Pro Leu Phe Ala Val Leu Cys Gly Asn Asp
65 70 75 80
His Val Asn Leu Pro Ile Met Glu Thr Phe Leu Ser Lys Ala Arg Leu
85 90 95
Pro Leu Gly Ala Thr Ser Ser Lys Gly Arg Arg His His Arg Ile Leu
100 105 110
Gly Leu Leu Asn Trp Leu Ser His Phe Ala Asn Pro Thr Glu Ala Leu
115 120 125
Asp Asn Val Leu Lys Tyr Leu Pro Lys Lys Asp Arg Glu Asn Val Lys
130 135 140
Glu Leu Leu Cys Cys Ser Met Glu Glu Tyr Gln Gln Ser Gln Val Lys
145 150 155 160
Leu Gln Asp Phe Phe Gln Cys Gly Thr Tyr Val Cys Pro Asp Ala Leu
165 170 175
Asn Leu Gly Leu Pro Glu Trp Val Leu Val Ala Leu Ala Lys Gly Gln
180 185 190
Leu Ser Pro Phe Ile Ser Asp Ala Leu Val Leu Arg Arg Thr Ile Leu
195 200 205
Pro Thr Gln Val Glu Asn Met Gln Gln Pro Asn Ala His Arg Ile Ser
210 215 220
Gln Pro Ile Arg Gln Ile Ile Tyr Gly Leu Leu Leu Asn Ala Ser Pro
225 230 235 240
His Leu Asp Lys Thr Ser Trp Asn Ala Leu Pro Pro Gln Pro Leu Ala
245 250 255
Phe Ser Glu Val Glu Arg Ile Asn Lys Asn Ile Arg Thr Ser Ile Ile
260 265 270

```
Asp Ala Val Glu Leu Ala Lys Asp His Ser Asp Leu Ser Arg Leu Thr
        275                 280                 285
Glu Leu Ser Leu Arg Arg Arg Gln Met Leu Leu Leu Glu Thr Leu Lys
    290                 295                 300
Val Lys Gln Thr Ile Leu Glu Pro Ile Pro Thr Ser Leu Lys Leu Pro
305                 310                 315                 320
Ile Ala Val Ser Cys Tyr Trp Leu Gln His Thr Glu Thr Lys Ala Lys
                325                 330                 335
Leu His His Leu Gln Ser Leu Leu Leu Thr Met Leu Val Gly Pro Leu
            340                 345                 350
Ile Ala Ile Ile Asn Ser Pro Gly Asn Val Asp Pro Val Pro Arg Gln
        355                 360                 365
Ala Gln Cys Leu Ala Pro Arg
    370                 375
```

<210> 396
<211> 1017
<212> DNA
<213> Homo sapiens

<400> 396

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atgaacacta ttaagggcac acaaaactat atccctgcca aatgcttttc ccttgatgca      60
ttctgccatc acttcagcaa tatgaataaa gctctactac ctctctttgc ggtgctatgt     120
ggaaatgacc atgttaatct acccatcatg gagacattct taagtaaagc gcgtcttcct     180
cttggagcta ccagttctaa agggaggaga caccaccgaa tcctgggact tctgaattgg     240
ttgtctcatt ttgccaaccc taccgaagca ctagataatg ttctgaaata cctcccaaaa     300
aaggatcgag aaaatgttaa ggaacttctc tgctgttcca tggaagaata ccaacagtcc     360
caggtgaagc tacaggactt cttccagtgt ggtacttatg tctgtccaga tgccttgaat     420
cttggtttac cagaatgggt attagtggct ttagctaaag gccagctatc tcctttcatc     480
agtgatgctt tggtcctaag acggaccatt cttcccacac aggtggaaaa catgcagcaa     540
ccaaatgccc acagaatatc tcagcccatc aggcaaatca tctatgggct tcttttaaat     600
gcctcaccac atctggacaa gacatcctgg aatgcattgc ctcctcagcc tctagctttc     660
agtgaagtgg aaaggattaa taaaaatatc agaacctcaa tcattgatgc agtagaactg     720
gccaaggatc attctgactt aagcagattg actgagctct ccttgaggag gcggcagatg     780
cttctgttag aaaccctgaa ggtgaaacag accattctgg agccaatccc tacttcactg     840
aagttgccca ttgctgtcag ttgctactgg ttgcagcaca ccgagaccaa agcaaagcta     900
catcatctac aatccttact gctcacaatg ctagtggggc ccttgattgc cataatcaac     960
agccctggaa atgtggaccc tgtacccagg caggctcagt gtcttgctcc tcgctag       1017
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<210> 397
<211> 338
<212> PRT
<213> Homo sapiens

<400> 397

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Met Asn Thr Ile Lys Gly Thr Gln Asn Tyr Ile Pro Ala Lys Cys Phe
 1               5                  10                  15
Ser Leu Asp Ala Phe Cys His His Phe Ser Asn Met Asn Lys Ala Leu
            20                  25                  30
Leu Pro Leu Phe Ala Val Leu Cys Gly Asn Asp His Val Asn Leu Pro
        35                  40                  45
Ile Met Glu Thr Phe Leu Ser Lys Ala Arg Leu Pro Leu Gly Ala Thr
    50                  55                  60
Ser Ser Lys Gly Arg Arg His His Arg Ile Leu Gly Leu Leu Asn Trp
65                  70                  75                  80
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Leu Ser His Phe Ala Asn Pro Thr Glu Ala Leu Asp Asn Val Leu Lys
85 90 95
Tyr Leu Pro Lys Lys Asp Arg Glu Asn Val Lys Glu Leu Leu Cys Cys
100 105 110
Ser Met Glu Glu Tyr Gln Gln Ser Gln Val Lys Leu Gln Asp Phe Phe
115 120 125
Gln Cys Gly Thr Tyr Val Cys Pro Asp Ala Leu Asn Leu Gly Leu Pro
130 135 140
Glu Trp Val Leu Val Ala Leu Ala Lys Gly Gln Leu Ser Pro Phe Ile
145 150 155 160
Ser Asp Ala Leu Val Leu Arg Arg Thr Ile Leu Pro Thr Gln Val Glu
165 170 175
Asn Met Gln Gln Pro Asn Ala His Arg Ile Ser Gln Pro Ile Arg Gln
180 185 190
Ile Ile Tyr Gly Leu Leu Leu Asn Ala Ser Pro His Leu Asp Lys Thr
195 200 205
Ser Trp Asn Ala Leu Pro Pro Gln Pro Leu Ala Phe Ser Glu Val Glu
210 215 220
Arg Ile Asn Lys Asn Ile Arg Thr Ser Ile Ile Asp Ala Val Glu Leu
225 230 235 240
Ala Lys Asp His Ser Asp Leu Ser Arg Leu Thr Glu Leu Ser Leu Arg
245 250 255
Arg Arg Gln Met Leu Leu Leu Glu Thr Leu Lys Val Lys Gln Thr Ile
260 265 270
Leu Glu Pro Ile Pro Thr Ser Leu Lys Leu Pro Ile Ala Val Ser Cys
275 280 285
Tyr Trp Leu Gln His Thr Glu Thr Lys Ala Lys Leu His His Leu Gln
290 295 300
Ser Leu Leu Leu Thr Met Leu Val Gly Pro Leu Ile Ala Ile Ile Asn
305 310 315 320
Ser Pro Gly Asn Val Asp Pro Val Pro Arg Gln Ala Gln Cys Leu Ala
325 330 335
Pro Arg

<210> 398
<211> 15
<212> DNA
<213> Homo sapiens

<400> 398
atgcttttcc cttga 15

<210> 399
<211> 4
<212> PRT
<213> Homo sapiens

<400> 399
Met Leu Phe Pro
1

<210> 400
<211> 30
<212> DNA

<213> Homo sapiens

<400> 400
atgcattctg ccatcacttc agcaatatga 30

<210> 401
<211> 9
<212> PRT
<213> Homo sapiens

<400> 401
Met His Ser Ala Ile Thr Ser Ala Ile
1 5

<210> 402
<211> 936
<212> DNA
<213> Homo sapiens

<400> 402
atgaataaag ctctactacc tctctttgcg gtgctatgtg gaaatgacca tgttaatcta 60
cccatcatgg agacattctt aagtaaagcg cgtcttcctc ttggagctac cagttctaaa 120
gggaggagac accaccgaat cctgggactt ctgaattggt tgtctcattt tgccaaccct 180
accgaagcac tagataatgt tctgaaatac ctcccaaaaa aggatcgaga aaatgttaag 240
gaacttctct gctgttccat ggaagaatac caacagtccc aggtgaagct acaggacttc 300
ttccagtgtg gtacttatgt ctgtccagat gccttgaatc ttggtttacc agaatgggta 360
ttagtggctt tagctaaagg ccagctatct cctttcatca gtgatgcttt ggtcctaaga 420
cggaccattc ttcccacaca ggtggaaaac atgcagcaac caaatgccca cagaatatct 480
cagcccatca ggcaaatcat ctatgggctt cttttaaatg cctcaccaca tctggacaag 540
acatcctgga atgcattgcc tcctcagcct ctagctttca gtgaagtgga aaggattaat 600
aaaaatatca gaacctcaat cattgatgca gtagaactgg ccaaggatca ttctgactta 660
agcagattga ctgagctctc cttgaggagg cggcagatgc ttctgttaga aaccctgaag 720
gtgaaacaga ccattctgga gccaatccct acttcactga agttgcccat tgctgtcagt 780
tgctactggt tgcagcacac cgagaccaaa gcaaagctac atcatctaca atccttactg 840
ctcacaatgc tagtggggcc cttgattgcc ataatcaaca gccctggaaa tgtggaccct 900
gtacccaggc aggctcagtg tcttgctcct cgctag 936

<210> 403
<211> 311
<212> PRT
<213> Homo sapiens

<400> 403
Met Asn Lys Ala Leu Leu Pro Leu Phe Ala Val Leu Cys Gly Asn Asp
1 5 10 15
His Val Asn Leu Pro Ile Met Glu Thr Phe Leu Ser Lys Ala Arg Leu
20 25 30
Pro Leu Gly Ala Thr Ser Ser Lys Gly Arg Arg His His Arg Ile Leu
35 40 45
Gly Leu Leu Asn Trp Leu Ser His Phe Ala Asn Pro Thr Glu Ala Leu
50 55 60
Asp Asn Val Leu Lys Tyr Leu Pro Lys Lys Asp Arg Glu Asn Val Lys
65 70 75 80
Glu Leu Leu Cys Cys Ser Met Glu Glu Tyr Gln Gln Ser Gln Val Lys
85 90 95

```
Leu Gln Asp Phe Phe Gln Cys Gly Thr Tyr Val Cys Pro Asp Ala Leu
            100                 105                 110
Asn Leu Gly Leu Pro Glu Trp Val Leu Val Ala Leu Ala Lys Gly Gln
        115                 120                 125
Leu Ser Pro Phe Ile Ser Asp Ala Leu Val Leu Arg Arg Thr Ile Leu
    130                 135                 140
Pro Thr Gln Val Glu Asn Met Gln Gln Pro Asn Ala His Arg Ile Ser
145                 150                 155                 160
Gln Pro Ile Arg Gln Ile Ile Tyr Gly Leu Leu Leu Asn Ala Ser Pro
                165                 170                 175
His Leu Asp Lys Thr Ser Trp Asn Ala Leu Pro Pro Gln Pro Leu Ala
            180                 185                 190
Phe Ser Glu Val Glu Arg Ile Asn Lys Asn Ile Arg Thr Ser Ile Ile
        195                 200                 205
Asp Ala Val Glu Leu Ala Lys Asp His Ser Asp Leu Ser Arg Leu Thr
    210                 215                 220
Glu Leu Ser Leu Arg Arg Arg Gln Met Leu Leu Leu Glu Thr Leu Lys
225                 230                 235                 240
Val Lys Gln Thr Ile Leu Glu Pro Ile Pro Thr Ser Leu Lys Leu Pro
                245                 250                 255
Ile Ala Val Ser Cys Tyr Trp Leu Gln His Thr Glu Thr Lys Ala Lys
            260                 265                 270
Leu His His Leu Gln Ser Leu Leu Leu Thr Met Leu Val Gly Pro Leu
        275                 280                 285
Ile Ala Ile Ile Asn Ser Pro Gly Asn Val Asp Pro Val Pro Arg Gln
    290                 295                 300
Ala Gln Cys Leu Ala Pro Arg
305                 310

<210> 404
<211> 12
<212> DNA
<213> Homo sapiens

<400> 404
atgtggaaat ga                                                    12

<210> 405
<211> 3
<212> PRT
<213> Homo sapiens

<400> 405
Met Trp Lys
 1

<210> 406
<211> 39
<212> DNA
<213> Homo sapiens

<400> 406
atgaccatgt taatctaccc atcatggaga cattcttaa                        39

<210> 407
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<211> 12
<212> PRT
<213> Homo sapiens

<400> 407
Met Thr Met Leu Ile Tyr Pro Ser Trp Arg His Ser
 1   5   10

<210> 408
<211> 33
<212> DNA
<213> Homo sapiens

<400> 408
atgttaatct acccatcatg gagacattct taa   33

<210> 409
<211> 10
<212> PRT
<213> Homo sapiens

<400> 409
Met Leu Ile Tyr Pro Ser Trp Arg His Ser
 1   5   10

<210> 410
<211> 870
<212> DNA
<213> Homo sapiens

<400> 410
atggagacat tcttaagtaa agcgcgtctt cctcttggag ctaccagttc taaagggagg   60
agacaccacc gaatcctggg acttctgaat tggttgtctc attttgccaa ccctaccgaa   120
gcactagata atgttctgaa atacctccca aaaaaggatc gagaaaatgt taaggaactt   180
ctctgctgtt ccatggaaga ataccaacag tcccaggtga agctacagga cttcttccag   240
tgtggtactt atgtctgtcc agatgccttg aatcttggtt taccagaatg ggtattagtg   300
gctttagcta aaggccagct atctcctttc atcagtgatg ctttggtcct aagacggacc   360
attcttccca cacaggtgga aaacatgcag caaccaaatg cccacagaat atctcagccc   420
atcaggcaaa tcatctatgg gcttctttta aatgcctcac cacatctgga caagacatcc   480
tggaatgcat tgcctcctca gcctctagct ttcagtgaag tggaaaggat taataaaaat   540
atcagaacct caatcattga tgcagtagaa ctggccaagg atcattctga cttaagcaga   600
ttgactgagc tctccttgag gaggcggcag atgcttctgt tagaaaccct gaaggtgaaa   660
cagaccattc tggagccaat ccctacttca ctgaagttgc ccattgctgt cagttgctac   720
tggttgcagc acaccgagac caaagcaaag ctacatcatc tacaatcctt actgctcaca   780
atgctagtgg ggcccttgat tgccataatc aacagccctg gaaatgtgga ccctgtaccc   840
aggcaggctc agtgtcttgc tcctcgctag   870

<210> 411
<211> 289
<212> PRT
<213> Homo sapiens

<400> 411
Met Glu Thr Phe Leu Ser Lys Ala Arg Leu Pro Leu Gly Ala Thr Ser
 1   5   10   15

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Ser Lys Gly Arg Arg His His Arg Ile Leu Gly Leu Leu Asn Trp Leu
            20                  25                  30
Ser His Phe Ala Asn Pro Thr Glu Ala Leu Asp Asn Val Leu Lys Tyr
        35                  40                  45
Leu Pro Lys Lys Asp Arg Glu Asn Val Lys Glu Leu Leu Cys Cys Ser
    50                  55                  60
Met Glu Glu Tyr Gln Gln Ser Gln Val Lys Leu Gln Asp Phe Phe Gln
65                  70                  75                  80
Cys Gly Thr Tyr Val Cys Pro Asp Ala Leu Asn Leu Gly Leu Pro Glu
                85                  90                  95
Trp Val Leu Val Ala Leu Ala Lys Gly Gln Leu Ser Pro Phe Ile Ser
            100                 105                 110
Asp Ala Leu Val Leu Arg Arg Thr Ile Leu Pro Thr Gln Val Glu Asn
        115                 120                 125
Met Gln Gln Pro Asn Ala His Arg Ile Ser Gln Pro Ile Arg Gln Ile
    130                 135                 140
Ile Tyr Gly Leu Leu Leu Asn Ala Ser Pro His Leu Asp Lys Thr Ser
145                 150                 155                 160
Trp Asn Ala Leu Pro Pro Gln Pro Leu Ala Phe Ser Glu Val Glu Arg
                165                 170                 175
Ile Asn Lys Asn Ile Arg Thr Ser Ile Ile Asp Ala Val Glu Leu Ala
            180                 185                 190
Lys Asp His Ser Asp Leu Ser Arg Leu Thr Glu Leu Ser Leu Arg Arg
        195                 200                 205
Arg Gln Met Leu Leu Leu Glu Thr Leu Lys Val Lys Gln Thr Ile Leu
    210                 215                 220
Glu Pro Ile Pro Thr Ser Leu Lys Leu Pro Ile Ala Val Ser Cys Tyr
225                 230                 235                 240
Trp Leu Gln His Thr Glu Thr Lys Ala Lys Leu His His Leu Gln Ser
                245                 250                 255
Leu Leu Leu Thr Met Leu Val Gly Pro Leu Ile Ala Ile Ile Asn Ser
            260                 265                 270
Pro Gly Asn Val Asp Pro Val Pro Arg Gln Ala Gln Cys Leu Ala Pro
        275                 280                 285
Arg
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<210> 412
<211> 54
<212> DNA
<213> Homo sapiens

<400> 412
atgttaagga acttctctgc tgttccatgg aagaatacca acagtcccag gtga 54

<210> 413
<211> 17
<212> PRT
<213> Homo sapiens

<400> 413
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Met Leu Arg Asn Phe Ser Ala Val Pro Trp Lys Asn Thr Asn Ser Pro
 1               5                  10                  15
Arg
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<210> 414
<211> 678
<212> DNA
<213> Homo sapiens

<400> 414
atggaagaat accaacagtc ccaggtgaag ctacaggact tcttccagtg tggtacttat 60
gtctgtccag atgccttgaa tcttggttta ccagaatggg tattagtggc tttagctaaa 120
ggccagctat ctcctttcat cagtgatgct ttggtcctaa gacggaccat tcttcccaca 180
caggtggaaa acatgcagca accaaatgcc cacagaatat ctcagcccat caggcaaatc 240
atctatgggc ttcttttaaa tgcctcacca catctggaca agacatcctg gaatgcattg 300
cctcctcagc ctctagcttt cagtgaagtg gaaaggatta ataaaaatat cagaacctca 360
atcattgatg cagtagaact ggccaaggat cattctgact taagcagatt gactgagctc 420
tccttgagga ggcggcagat gcttctgtta gaaaccctga aggtgaaaca gaccattctg 480
gagccaatcc ctacttcact gaagttgccc attgctgtca gttgctactg gttgcagcac 540
accgagacca aagcaaagct acatcatcta caatccttac tgctcacaat gctagtgggg 600
cccttgattg ccataatcaa cagccctgga aatgtggacc ctgtacccag gcaggctcag 660
tgtcttgctc ctcgctag 678

<210> 415
<211> 225
<212> PRT
<213> Homo sapiens

<400> 415
Met Glu Glu Tyr Gln Gln Ser Gln Val Lys Leu Gln Asp Phe Phe Gln
1 5 10 15
Cys Gly Thr Tyr Val Cys Pro Asp Ala Leu Asn Leu Gly Leu Pro Glu
20 25 30
Trp Val Leu Val Ala Leu Ala Lys Gly Gln Leu Ser Pro Phe Ile Ser
35 40 45
Asp Ala Leu Val Leu Arg Arg Thr Ile Leu Pro Thr Gln Val Glu Asn
50 55 60
Met Gln Gln Pro Asn Ala His Arg Ile Ser Gln Pro Ile Arg Gln Ile
65 70 75 80
Ile Tyr Gly Leu Leu Leu Asn Ala Ser Pro His Leu Asp Lys Thr Ser
85 90 95
Trp Asn Ala Leu Pro Pro Gln Pro Leu Ala Phe Ser Glu Val Glu Arg
100 105 110
Ile Asn Lys Asn Ile Arg Thr Ser Ile Ile Asp Ala Val Glu Leu Ala
115 120 125
Lys Asp His Ser Asp Leu Ser Arg Leu Thr Glu Leu Ser Leu Arg Arg
130 135 140
Arg Gln Met Leu Leu Leu Glu Thr Leu Lys Val Lys Gln Thr Ile Leu
145 150 155 160
Glu Pro Ile Pro Thr Ser Leu Lys Leu Pro Ile Ala Val Ser Cys Tyr
165 170 175
Trp Leu Gln His Thr Glu Thr Lys Ala Lys Leu His His Leu Gln Ser
180 185 190
Leu Leu Leu Thr Met Leu Val Gly Pro Leu Ile Ala Ile Ile Asn Ser
195 200 205
Pro Gly Asn Val Asp Pro Val Pro Arg Gln Ala Gln Cys Leu Ala Pro
210 215 220
Arg
225

<210> 416
<211> 21
<212> DNA
<213> Homo sapiens

<400> 416
atgtctgtcc agatgccttg a 21

<210> 417
<211> 6
<212> PRT
<213> Homo sapiens

<400> 417
Met Ser Val Gln Met Pro
1 5

<210> 418
<211> 24
<212> DNA
<213> Homo sapiens

<400> 418
atgggtatta gtggctttag ctaa 24

<210> 419
<211> 7
<212> PRT
<213> Homo sapiens

<400> 419
Met Gly Ile Ser Gly Phe Ser
1 5

<210> 420
<211> 15
<212> DNA
<213> Homo sapiens

<400> 420
atgctttggt cctaa 15

<210> 421
<211> 4
<212> PRT
<213> Homo sapiens

<400> 421
Met Leu Trp Ser
1

<210> 422
<211> 486
<212> DNA
<213> Homo sapiens

<400> 422
atgcagcaac caaatgccca cagaatatct cagcccatca ggcaaatcat ctatgggctt 60
cttttaaatg cctcaccaca tctggacaag acatcctgga atgcattgcc tcctcagcct 120
ctagctttca gtgaagtgga aaggattaat aaaaatatca gaacctcaat cattgatgca 180
gtagaactgg ccaaggatca ttctgactta agcagattga ctgagctctc cttgaggagg 240
cggcagatgc ttctgttaga aaccctgaag gtgaaacaga ccattctgga gccaatccct 300
acttcactga agttgcccat tgctgtcagt tgctactggt tgcagcacac cgagaccaaa 360
gcaaagctac atcatctaca atccttactg ctcacaatgc tagtggggcc cttgattgcc 420
ataatcaaca gccctggaaa tgtggaccct gtacccaggc aggctcagtg tcttgctcct 480
cgctag 486

<210> 423
<211> 161
<212> PRT
<213> Homo sapiens

<400> 423
Met Gln Gln Pro Asn Ala His Arg Ile Ser Gln Pro Ile Arg Gln Ile
1 5 10 15
Ile Tyr Gly Leu Leu Leu Asn Ala Ser Pro His Leu Asp Lys Thr Ser
20 25 30
Trp Asn Ala Leu Pro Pro Gln Pro Leu Ala Phe Ser Glu Val Glu Arg
35 40 45
Ile Asn Lys Asn Ile Arg Thr Ser Ile Ile Asp Ala Val Glu Leu Ala
50 55 60
Lys Asp His Ser Asp Leu Ser Arg Leu Thr Glu Leu Ser Leu Arg Arg
65 70 75 80
Arg Gln Met Leu Leu Leu Glu Thr Leu Lys Val Lys Gln Thr Ile Leu
85 90 95
Glu Pro Ile Pro Thr Ser Leu Lys Leu Pro Ile Ala Val Ser Cys Tyr
100 105 110
Trp Leu Gln His Thr Glu Thr Lys Ala Lys Leu His His Leu Gln Ser
115 120 125
Leu Leu Leu Thr Met Leu Val Gly Pro Leu Ile Ala Ile Ile Asn Ser
130 135 140
Pro Gly Asn Val Asp Pro Val Pro Arg Gln Ala Gln Cys Leu Ala Pro
145 150 155 160
Arg

<210> 424
<211> 54
<212> DNA
<213> Homo sapiens

<400> 424
atgcccacag aatatctcag cccatcaggc aaatcatcta tgggcttctt ttaa 54

<210> 425
<211> 17
<212> PRT
<213> Homo sapiens

<400> 425
Met Pro Thr Glu Tyr Leu Ser Pro Ser Gly Lys Ser Ser Met Gly Phe

1 5 10 15
Phe

<210> 426
<211> 15
<212> DNA
<213> Homo sapiens

<400> 426
atgggcttct tttaa 15

<210> 427
<211> 4
<212> PRT
<213> Homo sapiens

<400> 427
Met Gly Phe Phe
1

<210> 428
<211> 57
<212> DNA
<213> Homo sapiens

<400> 428
atgcctcacc acatctggac aagacatcct ggaatgcatt gcctcctcag cctctag 57

<210> 429
<211> 18
<212> PRT
<213> Homo sapiens

<400> 429
Met Pro His His Ile Trp Thr Arg His Pro Gly Met His Cys Leu Leu
1 5 10 15
Ser Leu

<210> 430
<211> 24
<212> DNA
<213> Homo sapiens

<400> 430
atgcattgcc tcctcagcct ctag 24

<210> 431
<211> 7
<212> PRT
<213> Homo sapiens

<400> 431
Met His Cys Leu Leu Ser Leu

1 5

<210> 432
<211> 240
<212> DNA
<213> Homo sapiens

<400> 432
atgcttctgt tagaaaccct gaaggtgaaa cagaccattc tggagccaat ccctacttca 60
ctgaagttgc ccattgctgt cagttgctac tggttgcagc acaccgagac caaagcaaag 120
ctacatcatc tacaatcctt actgctcaca atgctagtgg ggcccttgat tgccataatc 180
aacagccctg gaaatgtgga ccctgtaccc aggcaggctc agtgtcttgc tcctcgctag 240

<210> 433
<211> 79
<212> PRT
<213> Homo sapiens

<400> 433
Met Leu Leu Leu Glu Thr Leu Lys Val Lys Gln Thr Ile Leu Glu Pro
1 5 10 15
Ile Pro Thr Ser Leu Lys Leu Pro Ile Ala Val Ser Cys Tyr Trp Leu
20 25 30
Gln His Thr Glu Thr Lys Ala Lys Leu His His Leu Gln Ser Leu Leu
35 40 45
Leu Thr Met Leu Val Gly Pro Leu Ile Ala Ile Ile Asn Ser Pro Gly
50 55 60
Asn Val Asp Pro Val Pro Arg Gln Ala Gln Cys Leu Ala Pro Arg
65 70 75

<210> 434
<211> 90
<212> DNA
<213> Homo sapiens

<400> 434
atgctagtgg ggcccttgat tgccataatc aacagccctg gaaatgtgga ccctgtaccc 60
aggcaggctc agtgtcttgc tcctcgctag 90

<210> 435
<211> 29
<212> PRT
<213> Homo sapiens

<400> 435
Met Leu Val Gly Pro Leu Ile Ala Ile Ile Asn Ser Pro Gly Asn Val
1 5 10 15
Asp Pro Val Pro Arg Gln Ala Gln Cys Leu Ala Pro Arg
20 25

<210> 436
<211> 54
<212> DNA
<213> Homo sapiens

<400> 436
atgtggaccc tgtacccagg caggctcagt gtcttgctcc tcgctagttg gtaa 54

<210> 437
<211> 17
<212> PRT
<213> Homo sapiens

<400> 437
Met Trp Thr Leu Tyr Pro Gly Arg Leu Ser Val Leu Leu Leu Ala Ser
1 5 10 15
Trp

<210> 438
<211> 39
<212> DNA
<213> Homo sapiens

<400> 438
atggtgctaa gatgttgtat gcagagttcc aaagagtga 39

<210> 439
<211> 12
<212> PRT
<213> Homo sapiens

<400> 439
Met Val Leu Arg Cys Cys Met Gln Ser Ser Lys Glu
1 5 10

<210> 440
<211> 309
<212> DNA
<213> Homo sapiens

<400> 440
atgttgtatg cagagttcca aagagtgaag gcgcagacac ggctgggcac aagactggac 60
ttagacacag ctcacatctt ctgtcagtgg cagtcctgtc tccagatggg gatgtatctc 120
aaccagctgc tgtccactcc tctcccagag ccagacctaa ctcgactgta cagtggaagc 180
ctggtgcacg gactatgcca gcaactgcta gcatcgacct ctgtagaaag tctcctgagc 240
atatgtcctg aggctaagca actttatgaa tatctattca atgcccacaa ggtcatatgc 300
ccccgctga 309

<210> 441
<211> 102
<212> PRT
<213> Homo sapiens

<400> 441
Met Leu Tyr Ala Glu Phe Gln Arg Val Lys Ala Gln Thr Arg Leu Gly
1 5 10 15
Thr Arg Leu Asp Leu Asp Thr Ala His Ile Phe Cys Gln Trp Gln Ser
20 25 30
Cys Leu Gln Met Gly Met Tyr Leu Asn Gln Leu Leu Ser Thr Pro Leu

```
        35                  40                  45
Pro Glu Pro Asp Leu Thr Arg Leu Tyr Ser Gly Ser Leu Val His Gly
    50                  55                  60
Leu Cys Gln Gln Leu Leu Ala Ser Thr Ser Val Glu Ser Leu Leu Ser
65                  70                  75                  80
Ile Cys Pro Glu Ala Lys Gln Leu Tyr Glu Tyr Leu Phe Asn Ala His
                85                  90                  95
Lys Val Ile Cys Pro Arg
            100
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<210> 442
<211> 21
<212> DNA
<213> Homo sapiens

<400> 442
atgcagagtt ccaaagagtg a 21

<210> 443
<211> 6
<212> PRT
<213> Homo sapiens

<400> 443
Met Gln Ser Ser Lys Glu
 1   5

<210> 444
<211> 204
<212> DNA
<213> Homo sapiens

<400> 444
atggggatgt atctcaacca gctgctgtcc actcctctcc cagagccaga cctaactcga 60
ctgtacagtg gaagcctggt gcacggacta tgccagcaac tgctagcatc gacctctgta 120
gaaagtctcc tgagcatatg tcctgaggct aagcaacttt atgaatatct attcaatgcc 180
cacaaggtca tatgcccccg ctga 204

<210> 445
<211> 67
<212> PRT
<213> Homo sapiens

<400> 445
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Met Gly Met Tyr Leu Asn Gln Leu Leu Ser Thr Pro Leu Pro Glu Pro
 1               5                  10                  15
Asp Leu Thr Arg Leu Tyr Ser Gly Ser Leu Val His Gly Leu Cys Gln
            20                  25                  30
Gln Leu Leu Ala Ser Thr Ser Val Glu Ser Leu Leu Ser Ile Cys Pro
        35                  40                  45
Glu Ala Lys Gln Leu Tyr Glu Tyr Leu Phe Asn Ala His Lys Val Ile
    50                  55                  60
Cys Pro Arg
65
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<210> 446
<211> 198
<212> DNA
<213> Homo sapiens

<400> 446
atgtatctca accagctgct gtccactcct ctcccagagc cagacctaac tcgactgtac 60
agtggaagcc tggtgcacgg actatgccag caactgctag catcgacctc tgtagaaagt 120
ctcctgagca tatgtcctga ggctaagcaa ctttatgaat atctattcaa tgcccacaag 180
gtcatatgcc cccgctga 198

<210> 447
<211> 65
<212> PRT
<213> Homo sapiens

<400> 447
Met Tyr Leu Asn Gln Leu Leu Ser Thr Pro Leu Pro Glu Pro Asp Leu
1 5 10 15
Thr Arg Leu Tyr Ser Gly Ser Leu Val His Gly Leu Cys Gln Gln Leu
20 25 30
Leu Ala Ser Thr Ser Val Glu Ser Leu Leu Ser Ile Cys Pro Glu Ala
35 40 45
Lys Gln Leu Tyr Glu Tyr Leu Phe Asn Ala His Lys Val Ile Cys Pro
50 55 60
Arg
65

<210> 448
<211> 57
<212> DNA
<213> Homo sapiens

<400> 448
atgccagcaa ctgctagcat cgacctctgt agaaagtctc ctgagcatat gtcctga 57

<210> 449
<211> 18
<212> PRT
<213> Homo sapiens

<400> 449
Met Pro Ala Thr Ala Ser Ile Asp Leu Cys Arg Lys Ser Pro Glu His
1 5 10 15
Met Ser

<210> 450
<211> 231
<212> DNA
<213> Homo sapiens

<400> 450
atgaatatct attcaatgcc cacaaggtca tatgcccccg ctgaaatatt cctaccaaaa 60
ggtagatcaa attcaaaaaa aaaaaggcag aagaaacaga ataccagctg ttctaagaac 120

agagggagaa ccactgcaca caccaagtgt tggtatgagg gaaacaaccg gtttgggttg 180
ttaatggttg aaaacttaga ggaacatagt gaggcctcca acattgaata a 231

<210> 451
<211> 76
<212> PRT
<213> Homo sapiens

<400> 451
Met Asn Ile Tyr Ser Met Pro Thr Arg Ser Tyr Ala Pro Ala Glu Ile
1 5 10 15
Phe Leu Pro Lys Gly Arg Ser Asn Ser Lys Lys Lys Arg Gln Lys Lys
20 25 30
Gln Asn Thr Ser Cys Ser Lys Asn Arg Gly Arg Thr Thr Ala His Thr
35 40 45
Lys Cys Trp Tyr Glu Gly Asn Asn Arg Phe Gly Leu Leu Met Val Glu
50 55 60
Asn Leu Glu Glu His Ser Glu Ala Ser Asn Ile Glu
65 70 75

<210> 452
<211> 216
<212> DNA
<213> Homo sapiens

<400> 452
atgcccacaa ggtcatatgc ccccgctgaa atattcctac caaaaggtag atcaaattca 60
aaaaaaaaaa ggcagaagaa acagaatacc agctgttcta agaacagagg gagaaccact 120
gcacacacca agtgttggta tgagggaaac aaccggtttg ggttgttaat ggttgaaaac 180
ttagaggaac atagtgaggc ctccaacatt gaataa 216

<210> 453
<211> 71
<212> PRT
<213> Homo sapiens

<400> 453
Met Pro Thr Arg Ser Tyr Ala Pro Ala Glu Ile Phe Leu Pro Lys Gly
1 5 10 15
Arg Ser Asn Ser Lys Lys Lys Arg Gln Lys Lys Gln Asn Thr Ser Cys
20 25 30
Ser Lys Asn Arg Gly Arg Thr Thr Ala His Thr Lys Cys Trp Tyr Glu
35 40 45
Gly Asn Asn Arg Phe Gly Leu Leu Met Val Glu Asn Leu Glu Glu His
50 55 60
Ser Glu Ala Ser Asn Ile Glu
65 70

<210> 454
<211> 153
<212> DNA
<213> Homo sapiens

<400> 454
atgcccccgc tgaaatattc ctaccaaaag gtagatcaaa ttcaaaaaaa aaaaggcaga 60

agaaacagaa taccagctgt tctaagaaca gagggagaac cactgcacac accaagtgtt 120
ggtatgaggg aaacaaccgg tttgggttgt taa 153

<210> 455
<211> 50
<212> PRT
<213> Homo sapiens

<400> 455
Met Pro Pro Leu Lys Tyr Ser Tyr Gln Lys Val Asp Gln Ile Gln Lys
1 5 10 15
Lys Lys Gly Arg Arg Asn Arg Ile Pro Ala Val Leu Arg Thr Glu Gly
20 25 30
Glu Pro Leu His Thr Pro Ser Val Gly Met Arg Glu Thr Thr Gly Leu
35 40 45
Gly Cys
50

<210> 456
<211> 30
<212> DNA
<213> Homo sapiens

<400> 456
atgagggaaa caaccggttt gggttgttaa 30

<210> 457
<211> 9
<212> PRT
<213> Homo sapiens

<400> 457
Met Arg Glu Thr Thr Gly Leu Gly Cys
1 5

<210> 458
<211> 48
<212> DNA
<213> Homo sapiens

<400> 458
atggttgaaa acttagagga acatagtgag gcctccaaca ttgaataa 48

<210> 459
<211> 15
<212> PRT
<213> Homo sapiens

<400> 459
Met Val Glu Asn Leu Glu Glu His Ser Glu Ala Ser Asn Ile Glu
1 5 10 15

<210> 460
<211> 15
<212> DNA

<213> Homo sapiens

<400> 460
atgtatttaa tataa 15

<210> 461
<211> 4
<212> PRT
<213> Homo sapiens

<400> 461
Met Tyr Leu Ile
1

<210> 462
<211> 979
<212> DNA
<213> Homo sapiens

<400> 462
tcgacccacg cgtccgcctg ccagcggacg acgtggtcag catcatcgag gaggtggagg 60
agaagcggaa gcggaagaag aacgcccctc ccgagcccgt gccgcccccc cgtgccgccc 120
ccgcccccac ccacgtccgc tccccgcagc ccccgccccc cgcccccgct cccgcacgag 180
acgagctgcc ggactggaac gaggtgctcc cgccctggga tcgggaggag gacgaggtgt 240
acccgccagg gccgtaccac cctttcccca actacatccg gccgcggaca ctgcagccgc 300
cctcggcctt gcgccgccgc cactaccacc acgccttgcc gccttcgcgc cactatcccg 360
gccgggaggc ccaggcgcgg cgcgcgcagg aggaggcgga ggcggaggag cgccggctgc 420
aggagcagga ggagctggag aattacatcg agcacgtgct gctccggcgc ccgtgactgc 480
ccttcccgta accgcccccg cgcgcccccg ccgcgcgcgc gcgccggcgc ccccctccgt 540
gttgcccgct ccccctcggt gtttgcatgc gccccggccc tgccccttgg ccctgccccc 600
gtccccgggc tgcgtcggga cctgccagac ccccctcccg ggtcctgagc ccgaactccc 660
agagctcacc cgcgggtgac cgggggccag cccaggaggg cgggtggttt gtgcgagttc 720
ccttgccacg cggggccccg gccccatcaa gtccctctgg ggacgtcccc gtcggaaacc 780
ggaaaaagca gttccagtta attgtgtgaa gtgtgtctgt ctccagccct tcgggcctcc 840
cacgagcccc tccagcctct ccaagtcgct gtgaattgac cccttctttc ctttctctgt 900
tgtaaatacc cctcacggag gaaatagttt tgctaagaaa taaaagtgac tattttaaaa 960
aaaaaaaaaa agggcggcc 979

<210> 463
<211> 243
<212> DNA
<213> Homo sapiens

<400> 463
atgcgccccg gccctgcccc ttggccctgc ccctgtcccc gggctgcgtc gggacctgcc 60
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ccagcccagg agggcgggtg gtttgtgcga gttcccttgc cacgcggggc cccggcccca 180
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        35   40   45
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